

COMBINED SANITARY DISTRICTS IN CRAVEN.

R E P O R T S

For 1894.

(continued)

- I. GENERAL REPORT TO THE JOINT COMMITTEE.
- II. BEDBURY RURAL.
- III. BATTLE RURAL.
- IV. SPECIAL REPORT ON THE SANITARY CONDITION OF STEINFORTH (NOT, 1894).
- V. BRISTON RURAL.
- VI. CROSSLAND RURAL.
- VII. SEIPTON URBAN.
- VIII. SILSDEN URBAN.
- IX. OAKWORTH URBAN.
- X. OAKWORTH URBAN.
- XI. OSSENDRE URBAN.
- XII. BARNOLDINGTON URBAN.

BY

FRANCIS E. AYKINSON, L.D.S., L.M.S.,

OF THE MEDICAL OFFICE OF HEALTH.

1894.

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F o r 1 8 9 4 ,

COMPRISING

- I. GENERAL REPORT TO THE JOINT COMMITTEE.
- II. SEDBERGH RURAL.
- III. SETTLE RURAL.
- IV. SPECIAL REPORT ON THE SANITARY CONDITION OF STAINFORTH (OCT., 1894).
- V. SKIPTON RURAL.
- VI. KEIGHLEY RURAL.
- VII. SKIPTON URBAN.
- VIII. SILSDEN URBAN.
- IX. OAKWORTH URBAN.
- X. HAWORTH URBAN.
- XI. OXENHOPE URBAN.
- XII. BARNOLDSWICK URBAN.

BY

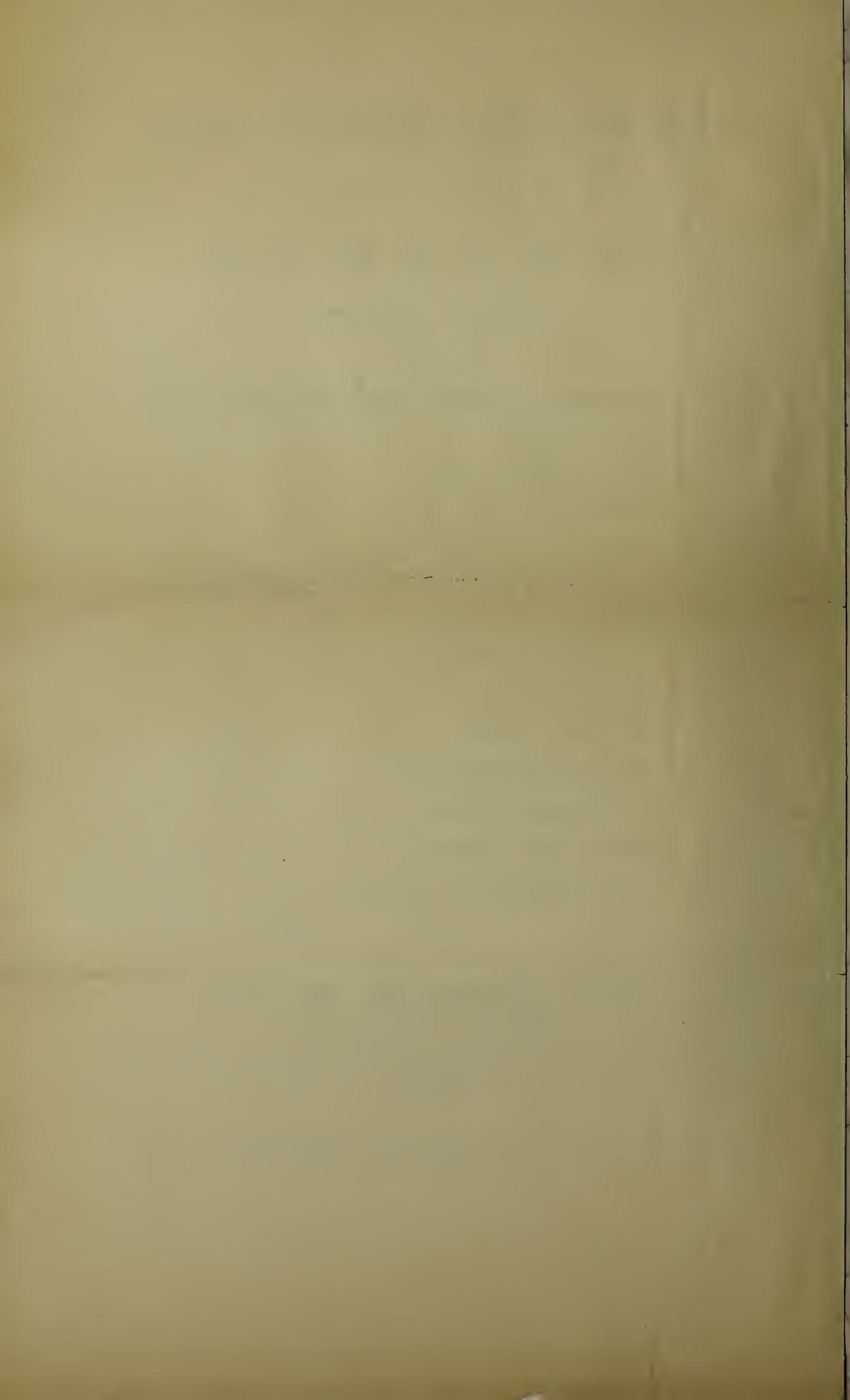
FRANCIS E. ATKINSON, L.R.C.P., Lond., M.R.C.S.,

THE MEDICAL OFFICER OF HEALTH.

1 8 9 5 .

Prepared in accordance with instructions from the Local Government Board.

PRINTED BY ORDER OF THE JOINT COMMITTEE.



C R A V E N

COMBINED SANITARY DISTRICTS.

Annual Report of the Medical Officer of Health to the Joint Committee, for the year 1894.

GENTLEMEN,

In accordance with Sub-Sec. 14, Art. 18, of the General Order of the Local Government Board, of March, 1891, I have now to present to you my Fifteenth Annual Report on the Combined Sanitary Districts of Craven. There has been no change this year in the constitution or area of the combination. Under the "Local Government Act 1894," the first election of Rural and Urban District Councillors and of Parish Councillors took place on the 15th of December, and the respective Rural and Urban Sanitary Authorities will henceforward be known as Rural and Urban District Councils. This report will contain, as heretofore, a brief summary of the measures taken during the year for the protection and improvement of the public health, the action taken by the several Sanitary Authorities in the Combination in the provision, improvement, or extension in their Districts, of works of water supply and sewerage, or in the abatement or removal of conditions injurious to health, and in the adoption or acquisition of additional powers for dealing with sanitary matters. An enumeration is given of the outbreaks of infectious disease in the different Districts, and the steps taken to limit their spread, together with tables showing the mortality from all causes, and at different age periods, and the meteorological conditions as to rainfall and temperature observed at various stations.

Inspection of District.—In addition to routine inspection of all parts of the District, special visits have been made in connection with outbreaks of infectious disease, and when other circumstances have required it. Some time has also been spent in the laboratory in water analysis. Special house-to-house surveys have been undertaken of the townships of Stainforth, Clapham-cum-Newby, and Longpreston, in the Settle Rural District, and a survey has been commenced of the town of Skipton, which has this year been divided into wards. A special report on the results of the survey of Stainforth was presented to the Authority in November last.

Sanitary Progress.—Considerable progress has been made during 1894, in the preparation and furtherance of schemes of sewerage in various districts, and the year has been one of great activity in the continued abatement of all forms of nuisances, and in the carrying out of minor sanitary improvements.

I have to congratulate you upon the fact that the death-rate for the whole District is the lowest upon record, and is 2·7 below the mean for the previous sixteen years. The mortality from zymotic diseases is also the lowest on record, and is 0·7 below the mean for the same period. The infant-mortality is also below the average, while the percentage of deaths of persons over 60 years of age to the total deaths, is the highest ever recorded. These results are highly satisfactory, and encouraging.

Change of Officers.—There has been no change this year among the Inspectors of Nuisances, and I am happy to say that two more of them have succeeded in obtaining the Certificate of the Sanitary Institute. I regret to have to record the loss by death of Mr. John Lister, who for 40 years had held the office of Clerk to the Settle Rural Sanitary Authority.

Rivers' Pollution.—The Conservancy Board for the rivers of West Riding appointed last year applied to Parliament for additional powers for dealing with river pollution, and the "West Riding Rivers' Conservancy Act," received the Royal Assent in August last. A staff of Inspectors has been appointed by the Board. Continued pressure has been brought to bear on the various Sanitary Authorities by the County Council, urging them to provide proper means of sewerage, and thus prevent the pollution of rivers. In a few cases legal proceedings were threatened unless immediate action were taken. The following schemes are in consequence in various stages of progress:—

River Aire.—Under the Skipton Rural Sanitary Authority.—Works for the proper sewerage of *Gargrave* and for a portion of *Kildwick* have been completed, and for *Thornton*, *Earby*, and *Kelbrook* are in progress; for *Embsay*, plans for the completion of scheme and works of sewage disposal are in preparation.

Under the Keighley Rural Sanitary Authority.—Plans for the proper sewerage and sewage disposal of *Sutton*, *Sutton Mill*, and *Eastburn*, and for sewage disposal works for *Steeton*, have been submitted to the Local Government Board, but sanction has not yet been received. Plans for the sewerage and sewage disposal of *Morton Banks* were also submitted, but owing to required modification, a second application has to be made. Plans for *East Morton* are prepared, but owing to difficulties in acquiring the land, have not yet been submitted.

At *Silsden*, plans for sewerage and sewage disposal have been prepared, and are now deposited with the Local Government Board. At *Orenhope*, plans have been prepared, but are not yet submitted, owing to difficulties for acquiring land for irrigation purposes. At *Haworth* nothing further has been done.

River Ribble.—Under the Settle Rural Sanitary Authority.—Sewage-disposal works for *Hellfield* are still in progress.

At *Barnoldswick*, under the Urban Sanitary Authority.—Plans for the sewerage and sewage disposal of the town have been submitted to and approved by the Local Government Board, and the work is being commenced.

River Wharfe.—Under the Skipton Rural Sanitary Authority.—Works for the sewerage and sewage disposal of *Addingham* have been carried out, and are almost completed. Plans for the proper sewerage of *Grassington* have been prepared. A portion of the sewerage of the village of *Threshfield* has been carried out.

River Lune.—Under the Sedbergh Rural Sanitary Authority.—Works for the proper sewerage and sewage disposal of the town of *Sedbergh* have been completed during the year.

Hospital Provision: Keighley and Bingley Joint Hospital Board.—Sanction to this scheme was delayed, owing to the near proximity of the temporary Small Pox Hospital to the proposed site of the other buildings belonging to the permanent Infectious Hospital, and the Hospital Board had to give an undertaking that no building on any part of the site be used for the reception of small pox cases at the same time that other infectious diseases are under treatment in any other building on the site.

At *Skipton*, plans have been prepared for a permanent hospital, and a provisional agreement made for the purchase of a new and suitable site, and it is to be hoped that the scheme will shortly be submitted to the Local Government Board.

No action has been taken by other Authorities with reference to hospital provision.

Infectious Diseases (Notification) Act, 1889.—This Act has been adopted by all the Authorities in the Combination, with one exception—the Barnoldswick Urban, whose failure to avail itself of this most useful measure is much to be regretted. It is to be hoped that another year will not be allowed to pass without securing uniform action in this respect throughout the district.

Notification Returns to the County Council.—I have forwarded to the West Riding County Council returns of the fresh cases notified each month in each of the districts, and of the deaths which have occurred from any infectious disease.

Public Health (Amendment) Act, 1890.—Part III. of this Act has been adopted this year by the Silsden Urban Sanitary Authority. It was already in force in the Skipton Rural, and Skipton, Oakworth, Haworth, and Oxenhope Urban Sanitary Districts.

Housing of the Working Classes Act, 1890.—I reported upon two houses under this Act, one at Silsden in February, and one at Grassington in the Skipton Rural District in December. In the latter case application was made to the Magistrates for a “closing order.”

Factory and Workshops Act, 1891.—Upon the receipt of the statutory notices under this Act from the Inspectors of Factories, a number of workshops in different districts have been examined as to their sanitary condition and fitness.

Closing of Public Well.—A public well, known as “Batty Well,” at Addingham, was found to be polluted and the probable source of an outbreak of typhoid fever in the village, and an order was obtained to close the well.

The following is a brief summary of the various matters which have engaged the attention of the different Authorities during the year:—

1.—SEDBERGH RURAL SANITARY AUTHORITY.

Water Supply.—Shortness of supply has again been experienced, and the water has had to be turned off at intervals. Negotiations are proceeding with regard to the completion of the large reservoir, and there seems every probability that this much-desired work will be accomplished during the present year.

Sedbergh Sewerage.—The works for the completion of the sewerage and sewage disposal for the town of Sedbergh have been carried out during the year, and the sewage is now delivered at one outfall, and dealt with by settling tank and irrigation on land at Birks. Nothing further has been done at Dent.

Scavenging.—The removal of nightsoil and ashpit refuse is still in the hands of occupiers of property in Sedbergh, and the ashes and rubbish are deposited in the Town’s Cricket Field, where levelling is required.

Public Health (Amendment) Act, 1890.—The Authority made application for powers under section 49 of the Public Health (Amendment) Act, 1890, and sanction was granted by the Local Government Board in December.

Sale of Food and Drugs Act, 1875.—Five samples of milk were taken by the Inspector of Nuisances, and submitted to the County Analyst. They were pronounced to be of superior quality.

2.—SETTLE RURAL SANITARY AUTHORITY.

Settle, Giggleswick, and Stackhouse Water Supply.—No agreement has yet been arranged with the owners of property in Stockdale with a view to taking water from this source for the augmentation of the public supply, and latterly it was decided to leave the matter over until the new District Council should come into force. The Deacon's waste water meter put in last year has been serviceable in detecting a large number of leakages throughout the system, chiefly occurring in the service pipes, and these were remedied at the time. Thereby a large saving of water has been effected. Shortness of supply was threatened in September, but this was happily averted by the turning off of the water from the mains during the night, from September 24th to October 25th.

Bentham Water Supply.—The work in connection with an improvement in the water supply to Fowgill, Lairgill, and Robin Lane was carried out early in the year, and consists in the laying of 1,567 yards of 3-in. iron pipes. The result of this alteration in the system has been very beneficial to the consumers on the higher level.

Ingleton Water Supply.—An extension of water main was laid from New Road to Kirksteads, consisting of 1,050 yards of 3-in. iron pipes.

Newby Water Supply.—At the close of last year the property owners in Newby were offered the opportunity of themselves carrying out the scheme for supplying the hamlet with water. Early in the present year Mr. Bateman offered on behalf of Mr. Farrer, of Ingleborough Hall, to provide a scheme, but on the Sanitary Authority requesting to be provided with a plan of the proposed works, a letter was received from Mr. Bateman at the end of April stating that Mr. Farrer, after careful consideration, had decided not to carry out a scheme, owing to some of the property owners at Newby being of opinion that a water supply was unnecessary. Notwithstanding this, abundant evidence was forthcoming during a second survey this year, that for some months during the year the inhabitants have suffered from deficient supply, and what water was available had to be fetched an unreasonable distance; otherwise, water from sources liable to pollution had to be used. At the June meeting of the Sanitary Authority it was decided to adjourn the consideration of providing a water supply for Newby *sine die*.

Newby Sewerage.—The property owners declining to take action in the matter, the Sanitary Authority instructed Mr. Foxcroft to prepare a small scheme for the proper sewerage and sewage disposal of Newby. This was presented on the 10th of April last, and estimates for the works and probable compensation were subsequently submitted. Some correspondence passed, and difficulties were experienced with regard to the acquirement of land for sewage disposal. The question has been frequently discussed and adjourned. At the Sanitary Authority's meeting, on September 25th, a letter was received from the County Council, asking what steps the Sanitary Authority proposed to take with regard to both water supply and sewerage of Newby.

Hellifield Sewerage.—Difficulties have been met with throughout the year in connection with sub-soil water in large quantities getting into the main outfall sewer. In consequence of this the works have not yet been completed or handed over by the Engineer to the Sanitary Authority.

Longpreston Sewerage—Outfall.—The site selected by the Engineer for the sewage-disposal of Longpreston, in January last, is land belonging to the endowment of

Longpreston School, and vested in Trustees, and, as there are vacancies in this body, the Sanitary Authority has to wait for their appointment before it is in a position to treat for the acquirement of this land. A letter was read at the meeting of the Sanitary Authority on September 25th, from the County Council, asking why no action had been taken in the matter, and the above was the reason given for the delay. The County Council then threatened legal proceedings unless a definite scheme were submitted by December 10th ult.

Stainforth Sewerage.—Complaints were made by Mr. William Foster, of Stainforth, to the Local Government Board, in April last, as to the unsanitary condition of the drainage of the village and the absence of proper means of sewerage, and copies of the correspondence were forwarded by the Local Government Board to the Sanitary Authority. After a further letter in May, a committee was appointed to report on the matter. After this the Clerk was directed to instruct the overseers to convene a meeting of owners and ratepayers at Stainforth, to consider the desirability of carrying out a scheme of sewerage for the village. On the 5th of June, the result of this meeting was reported, embodying a request from the ratepayers that the Sanitary Authority should postpone any action in providing a sewerage scheme which was considered by them to be unnecessary. A copy of their reasons was forwarded to the Local Government Board. On September 21st, the County Council wrote to the Sanitary Authority requesting that steps should be taken without undue delay to provide a scheme for the proper sewerage of Stainforth. On October 23rd, a further letter was read from the Local Government Board enclosing copy of a further letter from Mr. W. Foster, and requesting that the Medical Officer of Health should prepare a report on the sanitary condition of Stainforth. I then instructed Mr. Foxcroft to make a house-to-house survey of the township, upon which I based a Special Report, which was presented to the Sanitary Authority on November 20th, and copies of which were forwarded to the Local Government Board and County Council in accordance with sub-sec. 15, article 18, of the General Order of March, 1891.

Clapham and Austwick Burial Grounds.—During this year new burial grounds have been constructed, and the grounds laid out at Clapham and Austwick. Both were provided as extensions of the churchyard under the Home Office. The grounds were consecrated by the Bishop on Wednesday, May 23rd, and some interments have taken place.

Infectious Hospital at Giggleswick.—In January the Sanitary Authority considered a series of recommendations I had made with regard to the improvement of the hospital. They had been referred to a committee who met on the premises. The Sanitary Authority decided to enlarge the existing kitchen, provide a concrete floor, and put in a new kitchen range, and to glass the boundary walls at several points. This work was done in February. Action with reference to the other recommendations was adjourned.

3.—SKIPTON RURAL SANITARY AUTHORITY.

Buckden Water Supply.—The property owners took no action to provide an efficient supply for the village. In consequence the Sanitary Authority decided to carry out a small scheme. This has been prepared and approved by the Authority, and terms are now being negotiated with the owner of the spring, with a view to enclosing it and piping the water into the houses.

Kettlewell Water Supply.—The Sanitary Authority has this year prepared a scheme for providing the village of Kettlewell with water from a spring in Langcliffe Pasture. The property owners have signified their intention of carrying out the scheme by a Private Water Company, and intend carrying out the work early in the coming year.

Gargrave Scavenging.—The removal of nightsoil and ashpit refuse in Gargrave was undertaken by contract under the Sanitary Authority for two years. This was found to

entail great expense—£90 for 1893 and £76 for 1894—and since the completion of the new sewerage scheme nearly all the privies have been converted into some form of w.c. A considerable number of these are Duckett's slopwater-closets, and these appear to work admirably. In consequence, a fresh contract has been prepared for the removal of ashpit refuse only, and this was let in December for one year to Mr. Robert Preston for £28 per annum.

Thornton, Earby, and Kelbrook Sewerage.—A Local Government Board Inquiry was held on January 18th, 1894, under Major-General Crozier, R.E., into a proposed scheme for the joint sewerage of these three villages, prepared by Mr. A. E. Preston, C.E., of Bradford, asking for sanction for a loan of £7,500. The Local Government Board suggested a few modifications in the scheme, and when these were complied with sanction was obtained, and the contracts were let to Mr. Riley Hopkinson, of Halifax, for £4,575 main contract, and to Messrs. Blakeborough & Sons, of Brighouse, for iron work, for £301. The work was started early in June, and is still in progress.

Kildwick Sewerage.—A scheme prepared for Major Wilson for dealing with the sewerage of a portion of this village was approved by the Sanitary Authority, and work has been completed during the year.

Addingham Sewerage.—At the close of last year a Provisional Order was applied for for the compulsory purchase of land for dealing with the sewage of Addingham, the sanction to the proposed loan being deferred until the land was acquired. Early in the year the owner consented to sell the land without the intervention of the Order, and the sanction of the Local Government Board was given to proceed with the work. Owing to difficulties with the tenant as to compensation, the Sanitary Authority decided not to enter the land until his notice expired in February, 1895. The greater portion, however, of the contract was let in March this year to Godfrey Pearson, of Cleckheaton, for £1565 for No. 1 contract, and to Messrs. H. Lee, of Gomersal, for iron contract, for £90 12s. 10d. The work was commenced in May, and is practically completed.

Addingham Beck was cleansed by order of the Sanitary Authority in June.

Threshfield Sewerage.—During the present year a portion of the village of Threshfield has been properly sewered by the owner, Sir Mathew W. Wilson, and the sewage conveyed into a tank with effluent on to land.

Grassington Sewerage.—A scheme for the proper sewerage of Grassington has been prepared this year for the Sanitary Authority. Negotiations are now being made for the provisional purchase of land for sewage disposal purposes, and when completed the plans will be submitted to the Local Government Board.

4.—KEIGHLEY RURAL SANITARY AUTHORITY.

Morton Banks Sewerage.—A Local Government Board Inquiry was held in June last by Col. Ducat, R.E., when sanction was asked for a loan of £850 for Works of Sewerage and Sewerage disposal for West Morton. This, however, was not granted, and the Sanitary Authority was requested to further consider the matter on account of the uncertainty as to the continued use of the land for disposal purposes under the agreement. The sum of £850 was increased to £1020 in August, and an agreement has just been concluded provisionally to purchase a fresh site for sewage disposal, and an application to the Local Government Board will shortly be made.

Sutton, Sutton Mill, and Eastburn Sewerage.—A Local Government Board Inquiry was held in August last by F. H. Tullock, Esq., M.I.C.E., for sanction to borrow £8050

for Works of sewerage and sewage disposal for Sutton, Sutton Mill, and Eastburn. The Local Government Board required certain alterations in the plans submitted, and Mr. Broster, the engineer, attended at the Local Government Board Office with reference to these in November last. Sanction to this scheme has not yet been received.

Steeeton Sewage Disposal.—In June last an agreement was arranged for the provisional purchase of 4a. 1r. 20p. of land at Steeton for this purpose, at £100 per acre.

East Morton Sewerage.—No agreement has yet been effected for the purchase of land for sewage disposal, and failing this the plans have not yet been submitted to the Local Government Board.

Urban Powers under Section 160 Public Health Act (paragraph 1).—In April last the Sanitary Authority undertook the naming of the streets and numbering of the houses in Steeton and Sutton, but this has not yet been done in Morton.

5.—SKIPTON URBAN SANITARY AUTHORITY.

Division into Wards.—Application was made to the County Council under sec. 57 (sub-sec. 1) of the “Local Government Act, 1888,” for the division of the District into four Wards. A Local Inquiry was held in May last, and the Order was granted on July 11th.

Water Supply.—Little has been done in regard to this, except to push forward with the application to the Local Government Board for the requisite borrowing powers to enable the Local Board to become the owners of the “Eastby Mills” property. The usual Local Inquiry was held by Col. Hasted, on the 9th August last. The desired Order has not yet been made. The efforts of the Board to improve the inflow of water to the reservoir have been concluded during the year, and the result has been eminently satisfactory.

Sewerage and Drainage.—In this department a short extension has been made to the sewer in Craven-street, to accommodate new buildings about to be erected. Arrangements have been made with Earl of Thanet’s trustees, the holders of building land in the neighbourhood, for the construction of a sewer of large dimensions in Middletown, to accommodate present and expected buildings.

The Local Board has also arranged for, and is now constructing, a fresh water drain in Middletown, to carry away surface water which for some time past has accumulated in this part of the District.

Street Improvements.—In this department arrangements have been made for the widening of a portion of Brook-street, and laying down causeways along the part which is not now accommodated in that respect. The causeways in Gargrave-road are being improved. Flagged causeways, with requisite crossings, are being substituted in some parts for the old macadamized causeways; and in other parts the causeways are being asphalted. Arrangements have been made for the purchase of a steam road roller, for use in the repair of roads in the District. Borrowing powers for the purpose of raising the money to defray the cost are daily expected.

Permanent Hospital.—This is still in its preliminary stages. Plans have been made by the architect appointed by the Local Board, and progress has been made in their consideration, but no definite decision has yet been come to. The position of the various buildings upon the proposed site has been settled, provisionally.

Local Board Offices.—During the year the Local Board has entered into a provisional contract for the purchase of the large building locally known as the “Town Hall,” the

property of a Limited Liability Company. The requisite borrowing powers have been obtained from the Local Government Board; and it is proposed to take over the buildings on the 1st January, 1895, and to convert portions of them into public offices for the use of the Board and its officers.

Allotments.—No additional provision has been made of Allotments for the labouring classes. Arrangements have, however, been made for the labouring men in Middletown having placed at their disposal a field in the locality for the purposes of Allotments; and it is expected that possession of this field will be obtained on the 2nd February next.

6.—SILSDEN URBAN SANITARY AUTHORITY.

Silsden Water Supply.—This supply has been constant throughout the year. An extension consisting of 40 yards of 3-inch and 40 yards of 2-inch pipes, with two hydrants was laid in Skipton Road.

Silsden Sewerage.—The completed Plans and estimates prepared by Mr. Chas. Gott, C.E., of Bradford, were presented to the Board on November 9th last. The application was to be made to the Local Government Board at the commencement of the present year for sanction to borrow £10,646 for carrying out these works. A provisional purchase of 12 acres, 2 roods, and 7 perches of land from Lord Hothfield, for sewage disposal, has been arranged, at £100 per acre. It is proposed to deal with the sewage by settling tanks and irrigation. A portion of land to be acquired is in the Keighley Rural District, but for this it is proposed to effect an exchange.

Scavenging.—In April last the Board, which had hitherto contracted for the removal of nightsoil and ashpit refuse, itself undertook the work, and purchased two scavenging carts and a horse for the purpose at a cost of £66.

New Offices.—Plans for these, prepared at the end of last year, have remained in abeyance, and an application for a loan for the erection of the buildings will shortly be made to the Local Government Board.

Acts of Parliament Adopted.—Part III. of the Public Health (Amendment) Act, 1890, was adopted in April last.

Infectious Hospital.—No further action has been taken since application was made to the neighbouring Authorities (Keighley and Skipton) for a possible combination, the proposal being negatived.

7, 8, 9.—OAKWORTH, HAWORTH, AND OXENHOPE URBAN SANITARY AUTHORITIES.

Oakworth Water Supply.—At Water Sheddles Reservoir the polarite filters have been completed, and great satisfaction has been expressed on the improvement effected thereby in the quality and appearance of the water supplied in Oakworth.

Oakworth Sewerage.—Further extensions have been made this year in connection with this scheme, consisting of lengths of 9-inch sewer, from Staymaker Lane to Miss Cockshott's house, 55 yards; Ran Lear Bottom, 68 yards; Low Bank, 84 yards; School Street, 67 yards; opposite Victoria Terrace, 52 yards; and Chip Hill, 82 yards.

Haworth Sewerage.—No further steps have been taken to provide proper means of sewerage and sewage-disposal for Haworth.

Haworth Byelaws.—A committee was appointed to consider the whole question of the inadequacy of the present byelaws, and the possible adoption of a code in accordance with the models. It met, and the numerous points at variance were discussed at length, but it was decided not to repeal the existing byelaws.

Haworth Burial Grounds.—In December, Dr. Hoffman, of the Home Office, inspected the Baptist ground, Hall Green, in consequence of the reference made to its insanitary condition in my report of last year, and an Order in Council closing the ground (with certain exceptions) against further interments will be issued.

Infectious Hospital.—This Board has not taken any further steps with regard to the provision of means for the isolation of infectious cases.

Oxenhope Sewerage.—The plans prepared by Messrs. B. Hopkinson & Co. last year for the sewerage of a portion of the Oxenhope District have not yet been submitted to the Local Government Board. The delay has been caused in the first instance by the terms not being agreed upon for the purchase of the land necessary for sewage disposal.

A committee was appointed this year to inquire into different methods in use for sewage disposal, and they visited Baildon, Swinton near Manchester, and Guiseley, as well as the Oakworth Local Board's farm. The Authority also approached the Oakworth Local Board with a view to their dealing with the Oxenhope sewage as well as that of Haworth. This proposal, however, could not be entertained. Experiments have been conducted with regard to the treatment of trade effluents, and the results of these have been satisfactory.

Oxenhope Scavenging.—In March the Board, which had hitherto undertaken the removal of nightsoil ashpit refuse from Uppertown, Lowertown, Shaw, Lower Marsh, and Leeming, decided to let the scavenging by contract, and the work was let to Archibald Hartley and Joseph Greenwood for one year.

Infectious Hospital.—At the beginning of the year the Board passed a resolution expressing its willingness to join with the Keighley and Bingley Authorities in the erection of the Joint Permanent Hospital at Morton Banks, and two cases of small-pox were removed to the temporary hospital there.

10.—BARNOLDSWICK URBAN SANITARY AUTHORITY.

Water Supply.—The water supply has been plentiful throughout the year, a few small extensions of main laid, and a number of new houses connected. The Board is contemplating the putting in of further hydrants in the town.

Barnoldswick Sewerage.—A Local Government Board Inquiry was held on March 1st, by William J. Bird Clerke, Esq., M.I.C.E., into an application for a loan of £8,000 to carry out the plans for the sewerage of the town, prepared by Messrs. Brierley & Holt, of Blackburn. After certain modifications in the scheme had been submitted to, consisting of an alteration in the outfall-sewer, and the use of the whole of the five acres of land for filtration purposes after the sewage is acted upon by the international process, sanction was received on June 21st. Since then the specifications have been got out, the contracts have been let, and a clerk of works appointed.

Scavenging.—The removal of night-soil and ashpit refuse is undertaken by contract under the Board, and was again let in February for one year to Mr. Duckett for £142.

Barnoldswick Local Board (Gas) Act, 1893.—An application was made in September for sanction to a loan of £1,500 for gas purposes, to be expended in extending gas mains in the town, and for cooking apparatus.

Adoptive Acts of Parliament.—The adoption of the Infectious Diseases (Notification) Act, 1889, and Part III. of the Public Health (Amendment) Act, 1890, was again discussed, but no action taken.

New Offices.—Early in the year the Board obtained the use of more commodious premises, situate over the Craven Bank, in Church-street.

PREVALENCE OF ZYMOTIC DISEASE.

The Infectious Diseases (Notification) Act, 1889, has been adopted by all the Authorities in the Combination with one exception, viz., the Barnoldswick Urban. In the Sedbergh, Settle, Skipton, and Keighley Rural Districts, and the Skipton, Oakworth, and Haworth Urban Districts, the Act came into force early in 1890; in the Oxenhope Urban District in 1893, and in the Silsden Urban District in 1894.

During 1894, the total number of cases of infectious disease which came to my knowledge was 407. This includes only cases notifiable under the Act, and is a decrease of 264 from the previous year. These may be classified under four heads:—(a) Infectious cases notified under the Act by *medical men*, 391; (b) Infectious cases notified by *householders*, 7; (c) Infectious cases under the Act *not notified*, 1; (d) Infectious cases reported by medical men in district *where Act was not in force*, 8. These were divided among the various districts as follows:—Sedbergh Rural, 6; Settle Rural, 95; Skipton Rural, 123; Keighley Rural, 40; Skipton Urban, 52; Silsden Urban, 18; Oakworth Urban, 19; Haworth Urban, 31; Oxenhope Urban, 11; and Barnoldswick Urban, 12.

Small-Pox.—Two deaths occurred from this disease belonging to the district, in the Settle Rural District, but 1 other death was registered which took place in the Morton Banks Hospital, and belonged to the Bingley Township Local Board District. In all, 13 cases were notified, and they were distributed as follows:—Settle Rural, 9; Oxenhope Urban, 2; and Barnoldswick Urban, 2. Of these, 9 were males and 4 females; 1 was under five years of age, and 12 over five years of age.

Scarlatina.—Only six deaths were returned from this disease, as compared with 16 last year, and 21 in 1892. Of these 2 each occurred in the Settle Rural and Skipton Urban Districts, and 1 each in the Keighley Rural and Barnoldswick Urban Districts. In all, 252 cases came to my knowledge, as compared with 495 last year, and 379 in 1892; and they were distributed as follows:—Sedbergh Rural, 4; Settle Rural, 77; Skipton Rural, 82; Keighley Rural, 31; Skipton Urban, 29; Silsden Urban, 6; Oakworth Urban, 1; Haworth Urban, 11; Oxenhope Urban, 1; and Barnoldswick Urban, 10. Of the total 252, 118 were males, and 134 females; 57 were under five years of age, and 195 over five years of age.

Diphtheria.—Three deaths were ascribed to diphtheria, as compared with 7 last year and 6 in 1892. These occurred in the Settle Rural District. In all 20 cases were notified, and these occurred as follows:—Sedbergh Rural, 1; Settle Rural, 4; Skipton Rural, 5; Skipton Urban, 1; Oakworth Urban, 9. Of the 20 cases reported, 5 were males and 15 females; 3 were under five years of age, and 17 over five years of age.

Membranous Croup.—Five deaths were returned as due to Membranous Croup. Of these, 2 occurred in Skipton Rural, and 1 each in the Settle Rural, and Skipton and Oakworth Urban Districts. In all 13 cases were notified, as follows:—Settle Rural, 1; Skipton Rural, 3; Skipton Urban, 2; Oakworth Urban 3; Haworth Urban, 3; and Oxenhope Urban, 1. Of these 6 were males and 7 females; 12 under five years of age, and 1 over five years of age.

Typhus Fever.—No case of Typhus Fever occurred during the year.

Typhoid Fever.—Ten deaths were returned as from Typhoid Fever, as compared with 14 last year, and 7 in 1892. Of these 3 each occurred in the Skipton and Keighley Rural Districts, 2 in the Silsden Urban, and 1 each in the Sedbergh Rural and Haworth Urban Districts. In all 40 cases were reported, as compared with 56 last year, and 66 in 1892, and these were distributed as follows:—Sedbergh Rural, 1; Settle Rural, 2; Skipton Rural, 17; Keighley Rural, 3; Skipton Urban, 3; Silsden Urban, 6; Oakworth Urban, 1; Haworth Urban, 5; and Oxenhope Urban, 2. Of the total 40 cases reported, 27 were males and 13 females; 3 were under five years of age, and 37 over 5 years of age.

Continued Fever.—No death was returned under this head, but 4 cases were reported, 1 in the Skipton Rural and 3 in the Haworth Urban Districts. Of these, 1 was a male and 3 females, and all were over five years of age.

Puerperal Fever.—A single death was returned from this cause, and no other cases were reported.

Erysipelas.—Five deaths were due to Erysipelas, 2 in the Settle Rural, and 1 each in the Sedbergh and Skipton Rural, and in the Skipton Urban Districts. There were 64 cases notified, as compared with 72 last year, and 42 in 1892, and these were distributed as follows:—Settle Rural, 2; Skipton Rural, 15; Keighley Rural, 6; Skipton Urban, 17. Silsden Urban, 6; Oakworth Urban, 4; Haworth Urban, 9; and Oxenhope Urban, 5. Of these, 20 were males, and 44 females; one was under 5 years and 63 over 5 years of age.

Measles.—Only six deaths were returned from this cause, as compared with 20 in each of the two preceding years. These occurred 2 each in the Settle and Skipton Rural Districts, and 1 each in the Skipton and Oakworth Urban Districts. Measles were prevalent in the Settle Rural District at Eldroth and Austwick in August and September, at Horton-in-Ribblesdale in November, and Longpreston in December; and in the Skipton Rural District at Draughton and Halton East in January, and at Lothersdale in December. This disease is not included in the Notification Act in force, and individual cases are not reported. Of the deaths, 4 were under five years, and 2 over 5 years of age.

Whooping Cough.—Eleven deaths were returned from this cause, as compared with 4 last year, and 39 in 1892. These occurred, 3 in the Oakworth Urban, 2 each in the Settle and Keighley Rural Districts, and 1 each in the Skipton Rural, and Skipton, Silsden, and Oxenhope Urban Districts. This disease was prevalent at East Morton in the Keighley Rural District in January. Whooping Cough is not notifiable under the Act, and no individual cases were reported.

Diarrhœa and Dysentery.—Only eight deaths were returned under this head, as compared with 34 last year, and 12 in 1892. Of these, 6 occurred in the Skipton Rural District, and 1 each in the Skipton and Oxenhope Urban Districts. Of the deaths, 4 were under and 4 over 5 years of age.

Influenza.—Twenty deaths were returned as due to influenza and its complications, as compared with 38 last year, and 58 in 1892. The deaths occurred as follows:—Sedbergh Rural, 4; Settle Rural, 8; Skipton Rural, 4; Keighley Rural, 1; Skipton Urban, 2; and Silsden Urban, 1. Although a few isolated cases occurred throughout the year, the majority of the cases took place in the early part of the year.

Phthisis.—The deaths returned from consumption were 92 in number, as compared with 117 last year, and 82 in 1892.

Bronchitis, Pneumonia, and Pleurisy.—From diseases of the lungs 248 were registered, as compared with 237 last year, and 258 in 1892.

The details of the various outbreaks of infectious disease will appear in the local reports.

Table showing cases coming to the knowledge of the Medical Officer of Health of diseases included in the Infectious Diseases (Notification) Act, 1889 :—

DISEASE.	MALE.	FEMALE.	— 5.	+ 5.	TOTAL.
Smallpox	9	4	1	12	13
Scarlatina	118	134	57	195	252
Diphtheria	5	15	3	17	20
Membranous Croup	6	7	12	1	13
Typhus Fever.....	..	..	..	..	..
Typhoid Fever	27	13	3	37	40
Continued Fever.....	1	3	..	4	4
Relapsing Fever.....	..	..	..	..	..
Puerperal Fever .....	..	1	..	1	1
Cholera .....	..	..	..	..	..
Erysipelas	20	44	1	63	64
TOTAL	186	221	77	330	407

Schools Closed.—The following Schools were closed in consequence of the prevalence of infectious disease in the neighbourhood, with a view to checking its spread:—*For Scarlet Fever*—The Langeliffe School in February, and the Burton-in-Lonsdale School in December (Settle Rural). *For Measles*—The Schools at Eldroth in September, Austwick in October, Horton-in-Ribblesdale in November, and Longpreston in December (Settle Rural); the Draughton School in January, and the Lothersdale School in December (Skipton Rural). *For Whooping Cough*—The East Morton School in January (Keighley Rural).

Removal of Cases to Hospital.—The Giggleswick Hospital in the Settle Rural District was used during the year for the isolation of nine cases of Smallpox, and 10 cases of Scarlatina. The Joint Temporary Hospital at Skipton, belonging to the Urban and Rural Authorities, was used for the isolation of 40 cases of Scarlatina—23 from the Urban and 17 from the Rural District. The Keighley and Bingley Joint Temporary Hospital at Morton Banks was used for isolating two cases of Smallpox from Oxenhope; and two cases of Smallpox were isolated at the Barnoldswick Temporary Hospital. Total cases isolated in hospital, 63.

In one instance, I had to apply to the magistrates for an order, under sec. 124 of the Public Health Act, 1875, for the compulsory removal of a case of scarlatina to hospital, but fortunately this had not to be enforced. No legal proceedings have been taken this year under the Infectious Diseases (Notification) Act, 1889, for failure to notify cases.

VITAL STATISTICS.

A summary of these, classified as to age, disease, and locality, together with their respective rates, will be found in Tables V., VI., and VII.

Births.—The total births registered during 1894 were 1,972 in number, a decrease of 76 from last year. This is equivalent to a birth-rate of 25·4 per 1,000, as compared with 26·6 last year, and 26·3 in 1892. Of the total births, 1,134 took place in the Rural, and 838 in the Urban Districts, as against 1,141 and 907 during the year 1893, and give respective birth-rates of 25·3 and 25·6 per 1,000. The birth-rate was highest in the Barnoldswick Urban (31·7) and Skipton Urban (28·5) Districts, and lowest in the Haworth Urban District (18·1).

Deaths.—There were 1,153 deaths registered of persons belonging to the District. This is a decrease of 145 upon last year, and is equivalent to a death-rate for the Combined District of only 14·8 per 1,000 living (the lowest death-rate upon record), as compared with 16·8 in each of the two previous years, and 19·1 in 1891. Of the total deaths 659 belonged to the Rural, and 494 to the Urban Districts, as against 697 and 601 during 1893, giving respective death-rates of 14·7 and 15·1 per 1,000. The highest death-rate is found in the Barnoldswick Urban (18·2) and Sedbergh Rural (17·6) Districts, and the lowest in the Keighley Rural (12·1) and Skipton Urban (12·7) Districts.

Infant Mortality.—Of the 1,153 deaths, 234 were those of children under one year of age (121 in the Rural and 113 in the Urban Districts). This is equivalent to an infant mortality of 11·8 per cent. of registered births, as compared with 12·3 in 1893 and 12·7 in 1892. The highest infant mortality rate is furnished by the Haworth Urban (17·5) and Barnoldswick Urban (16·6). The lowest rates are found in the Skipton Rural (9·0) and Keighley Rural (9·3) Districts. Among children under five years of age there were 363 deaths, as compared with 377 last year and 379 in 1892. This gives a percentage to total deaths of 31·4, as compared with 29·0 last year. The highest percentage is reached in the Skipton Urban (42·3) and the lowest in the Sedbergh Rural District (23·6).

Among persons aged 60 years and upwards there were 436 deaths. This gives a percentage to total deaths of 37·8, as compared with 36·5 last year, and 37·6 in 1892. The highest percentage is reached in the Sedbergh Rural (56·9), the Oxenhope Urban coming next (48·7); and the lowest in the Skipton Urban District (27·7).

Causes of Death.—Under the head of diseases of the lungs (bronchitis, pneumonia, and pleurisy), 248 deaths were returned, as against 236 last year, and 258 in 1892; from influenza and its complications, 20, as against 38 last year, and 58 in 1892; from diseases of the heart, 138, as compared with 136 last year, and 120 in 1892; and from consumption, 92, as compared with 117 last year, and 82 in 1892.

Zymotic Rate.—The zymotic rate is calculated, as heretofore, upon the deaths returned from the seven principal zymotic diseases as designated by the Registrar General, viz.:—Smallpox, measles, scarlatina, diphtheria and membranous croup, whooping cough, fever (including typhus, enteric or typhoid, and other doubtful), and diarrhoea and dysentery. The zymotic rate for the whole district is only 0·6 per 1000 living, as compared with 1·3 last year, and 1·5 in 1892. In none of the Districts has there been an entire absence of deaths from infectious disease. The highest zymotic rate occurs in the Keighley Rural (1·0), the Settle Rural and Oakworth and Oxenhope Urban Districts each coming next with 0·8, while the lowest appears in the Haworth Urban (0·1), and Sedbergh Rural and Barnoldswick Urban Districts each (0·2).

METEOROLOGICAL RETURNS.

In Tables I. to IV. will be found Rainfall Returns from 25 stations in the different drainage areas of the district, and also a record of the mean daily temperature of each month, taken at Skipton.

Of the 22 returns for the year, 20 had their highest monthly rainfall recorded in February and 2 in October. The highest individual monthly record occurred at Arncliffe for February, and amounted to 10·40 inches. The highest rainfall for the year occurred as usual at Arncliffe, amounting to 68·87 inches, and is the highest recorded since 1882. Malham Tarn comes next with 60·89 inches. At all the stations, without exception, the rainfall this year was above the average for a number of years past. The number of days on which ·01 or more fell exceeded 200 in eight instances, the largest number occurring at Upper Barden Reservoir (239). The greatest rainfall in 24 hours was registered at Arncliffe (1·64) on November 13th; Sedbergh coming next with (1·38) on December 21st. I have specially to thank Mr. James Watson, Engineer to the Waterworks of the Bradford Corporation; and also the Rev. W. A. Shuffrey, of Arncliffe; Messrs. W. Morrison, of Malham Tarn; J. Handley, of Sedbergh; W. Gomersall, of Otterburn; E. Townsend, of Skipton; and J. W. Shepherd, of Settle, for kindly supplying this information.

I am, Gentlemen,

Your obedient servant,

FRANCIS E. ATKINSON, L.R.C.P. (London), M.R.C.S.

To the Joint Committee of the
Combined Sanitary Authorities of Craven.

SETTLE, FEBRUARY 9TH, 1895.

TABLE I.

RAINFALL IN THE RIBBLE DRAINAGE AREA.		
NAME OF PLACE.	Settle.	
$\frac{50}{100}$ { Diameter of Funnel Height { Above Ground of top { Above O.D.	8 in. 1 ft. 2 in. 525 ft.	
Number of days on which .01 or more fell Greatest fall { Depth in 24 hours { Date	220 1.35 Oct. 23rd.	
January	6.39	
February	7.92	
March	5.49	
April	2.35	
May	2.19	
June	2.95	
July	2.79	
August	4.56	
September	0.40	
October	5.65	
November	3.98	
December	4.73	
Total Rainfall in 1894	49.40	
Total Rainfall in 1893	40.61	
" 1892	44.45	
" 1891	50.27	
Average Rainfall	41.78	
Number of years on which the averages are calculated	9	
Variation in 1894 from Average	7.62 +	

TABLE II.

RAINFALL IN THE LUNE DRAINAGE AREA.	
"Halsteads," Thornton-in- Lonsdale.	"Brigflatts," Sedburgh.
9 in. 2 ft. 414 ft.	5 in. 1 ft. 300 ft.
— — —	210 1.38 Dec. 21st.
No. Return.	4.93
	9.15
	4.45
	1.87
	4.33
	2.98
	4.08
	4.94
	0.52
	4.89
	5.64
	6.27
....	54.05
....	47.00
....	58.87
....	63.23
43.75	49.86
11	10
....	4.19 +

TABLE III.

RAINFALL AND MEAN TEMPERATURE IN THE AIRE DRAINAGE AREA.	
Skipton.	Mean Daily Temperature of each Month taken at SKIPTON.
8 in. 2 ft. 360 ft.	
199 1.06 Feb. 11th.	Degrees Fahr.
3.95	January 36.38
5.77	February 38.17
3.34	March 41.87
1.94	April 47.78
1.61	May 47.75
2.44	June 55.93
2.79	July 61.64
3.42	August 56.59
0.21	September 51.86
3.66	October 46.48
2.38	November 45.35
3.21	December 39.59
34.72	Mean for year.. 47.44
31.17	
30.00	
34.25	
32.73	
13	
1.99 +	

TABLE III (continued).

RAINFALL IN THE AIRE DRAINAGE AREA.												
NAME OF PLACE.	Malham Tarn.	Otterburn.	Crosshills.	Cringles	Silsden	Gill Grange.	"Stairs," Oxenhope.	Leeshaw Reservoir.	Leeming Reservoir.	Nan's Scar, Oxenhope.	Thornton-in- Craven.	"Sunnydale," East Morton.
Rain Gauge { Diameter of Funnel { Height { Above Ground { of top { Above O.D.....	5 in. 1 ft. 1296 ft.	5 in. 1 ft. 510 ft.	8 in. 1 ft. 405 ft.	5 in. 1 ft. 760 ft.	5 in. 1 ft. 560 ft.	5 in. 1 ft. 883 ft.	5 in. 1 ft. 1401 ft.	5 in. 1 ft. 875 ft.	5 in. 1 ft. 850 ft.	5 in. 1 ft. 1101 ft.	5 in. 5ft. 4in. 456 ft.	5 in. 1 ft. 975 ft.
Number of days on which .01 or more fell	231	208	....	192	192	....	....	....	....	....	....	198
Greatest fall { Depth in 24 hours { Date	1.29 Oct. 23.	1.05 Feb. 11.	....	1.07 July 25.	0.98 Feb. 10.	....	....	....	....	....	....	1.00 July 25.
January	6.88	5.47	No. Return.	3.55	3.60	3.05	5.87	6.32	6.12	6.62	No Return.	3.92
February	9.03	7.47		5.61	5.71	4.45	8.47	8.57	8.17	10.26		4.97
March	5.58	4.48		3.13	3.04	3.25	*	4.48	4.13	4.79		2.56
April	2.96	1.90		2.13	2.05	2.40	2.57	2.59	2.51	2.50		2.72
May	3.58	2.93		1.33	1.19	1.25	3.00	2.78	2.55	2.89		1.47
June	4.21	2.55		2.52	2.53	3.15	4.20	4.01	3.75	4.08		3.02
July	4.05	4.61		3.57	3.08	3.13	4.59	4.25	3.77	4.23		3.36
August	5.92	4.16		3.38	3.26	3.45	5.56	5.28	4.55	5.59		3.01
September	0.58	0.45		0.40	0.36	0.81	0.73	0.52	0.47	0.52		0.59
October	7.06	5.20		4.08	3.73	4.50	6.90	6.43	6.34	6.56		4.42
November	4.84	3.66		1.67	1.77	1.78	3.73	3.59	2.98	3.95		1.74
December	6.20	4.24		2.95	2.70	2.38	4.98	4.54	4.04	5.32		2.63
Total Rainfall in 1894	60.89	47.12	.....	34.32	33.02	33.60	*	53.36	49.38	57.31	.....	34.41
Total rainfall in 1893	53.05	39.44	....	29.25	27.70	27.20	46.54	44.96	39.73	45.41	....	29.40
" 1892	57.07	43.66	....	30.71	29.83	31.89	50.21	45.39	43.63	46.43	....	32.82
" 1891	61.33	44.48	....	34.31	33.55	34.28	55.76	52.78	49.63	*	....	35.68
Average Rainfall.....	57.94	40.60	43.13	32.10	31.21	31.34	49.50	45.62	41.02	43.51	40.24	32.84
Number of years on which the averages are calculated	24	23	10	18	19	19	16	18	18	18	25	14
Variation in 1894 from average	2.95 +	6.52 +	....	2.22 +	1.81 +	2.26 +	....	7.74 +	8.36 +	3.80 +	....	1.57 +

* Incomplete.

TABLE IV.

RAINFALL IN WHARFE DRAINAGE AREA.

NAME OF PLACE.		Arnccliffe.	Trunla Hill,	Grimwith Reservoir.	Sanded Beck,	Thorpe Fell.	Upper Barden Reservoir.	Barden Reservoir.	Chelker Reservoir.	Addingham Moor, Counter Hill
Rain Gauge { Diameter of Funnel..... Height { Above Ground of top { Above O.D. ...	8 in. 1 ft. 6 in. 750 ft.	5 in. 1 ft 1201 ft.	5 in. 1 ft. 893 ft.	5 in. 1 ft. 676 ft.	5 in. 1 ft. 1661 ft.	5 in. 1 ft. 1250 ft.	5 in. 1 ft. 746 ft.	5 in. 1 ft. 730 ft.	5 in. 1 ft. 951 ft.	
Number of days on which .01 or more fell... Greatest fall { Depth in 24 hours { Date.....	230 1·64 Nov. 13	.. ... ...	215 1·27 Feb. 10 & Oct. 23.	... ... ...	... ... ...	239 1·07 Feb. 10	232 1·20 Feb. 10	... ... ...	... ... ...
January	9·70	5·74	6·50	5·12	3·37	4·56	4·68	3·07	2·45	
February	10·40	7·21	8·81	8·50	6·17	5·99	6·68	5·94	3·85	
March	7·45	3·84	4·75	4·54	3·48	3·62	3·81	2·76	2·66	
April	2·55	3·01	3·43	2·39	2·26	2·52	2·43	1·97	1·95	
May	2·91	2·10	2·39	2·19	2·11	2·47	2·15	1·55	1·57	
June	3·81	2·31	2·70	2·64	2·46	3·19	2·85	2·93	3·15	
July	4·47	2·90	3·28	3·95	4·40	3·69	3·86	3·21	3·38	
August	5·33	3·22	3·97	3·95	4·39	4·04	4·43	3·86	3·45	
September	0·54	0·31	0·37	0·78	0·46	0·70	0·53	0·44	0·52	
October	7·99	5·98	6·77	5·61	4·83	4·63	4·85	4·52	4·48	
November	5·82	3·07	3·40	3·19	3·36	2·94	2·83	1·96	1·45	
December	7·90	4·17	4·50	4·23	4·07	3·54	4·48	3·09	*	
Total Rainfall in 1894.....	68·87	43·86	50·87	47·09	41·36	41·89	43·58	34·81	*	
Total Rainfall in 1893	54·96	35·67	40·73	41·09	40·72	41·41	40·84	30·85	28·03	
" 1892	58·89	36·46	44·60	42·12	39·49	43·43	43·53	33·80	30·20	
" 1891	61·63	36·18	46·40	*	35·78	36·50	42·55	35·44	32·03	
Average Rainfall	60·65	38·67	46·10	41·78	36·40	40·41	43·28	33·87	31·40	
Number of years on which the averages { are calculated	34	18	19	15	16	19	19	19	16	
Variation in 1894 from average.....	8·22 +	5·19 +	4·77 +	5·31 +	4·96 +	1·48 +	0·30 +	0·94 +	...	

* Incomplete.

TABLE V.

SUMMARY OF STATISTICS FOR THE YEAR 1894.

DISTRICT.	Average.	Rateable Value, 1894.	Population enumerated, 1881.	Population enumerated, 1891.	Population estimated, 1894.	Inhabited houses, 1894.	Total Births.	Total Deaths.	Birth-rate per 1000 living.	Death-rate per 1000 living.	Zymotic-rate per 1000 living.	Deaths under 1 year, per cent. of total deaths.	Deaths under 1 year, per cent. of registered births.	Deaths under 5 years, per cent. of total deaths.	Deaths over 60 years, per cent. of total deaths.
Sedbergh Rural District...	52,665	30,131	4,079	4,040	4,070	975	109	72	26.7	17.6	0.2	16.6	11.0	23.6	56.9
Settle " "	151,942	131,085	13,800	14,071	14,160	2,947	353	217	24.9	15.3	0.8	21.5	13.3	30.7	39.6
Skipton " "	145,757	152,941	20,672	20,575	20,650	4,740	554	*299	26.8	14.4	0.6	16.7	9.0	26.7	40.4
Keighley " "	8,178	22,463	5,416	5,756	5,858	1,363	118	71	20.1	12.1	1.0	15.4	9.3	26.7	35.2
Total Rural Districts.....	358,542	336,620	43,967	44,442	44,738	10,025	1134	659	25.3	14.7	0.7	18.1	10.5	27.7	41.5
Skipton Urban District...	4,245	29,619	9,091	10,376	10,760	2,302	307	+137	28.5	12.7	0.5	24.8	11.0	42.3	27.7
Silsden " "	7,060	11,619	3,329	3,866	4,000	1,030	99	60	24.7	15.0	0.7	18.3	11.1	31.6	38.3
Oakworth " "	11,905	20,506	5,769	5,870	5,900	1,520	148	99	25.0	16.7	0.8	20.2	13.5	34.3	30.3
Haworth " "	1,873	10,829	3,816	5,034	5,340	1,208	97	81	18.1	15.1	0.1	20.9	17.5	32.0	33.3
Oxenhope " "	4,087	7,830	2,442	2,475	2,490	620	55	41	22.0	16.4	0.8	21.9	16.3	31.7	48.7
Barnoldswick " "	2,129	9,774	4,028	4,131	4,160	1,035	132	*76	31.7	18.2	0.2	28.9	16.6	38.1	34.2
Total Urban Districts ...	31,299	90,177	28,475	31,752	32,650	7,715	838	494	25.6	15.1	0.5	22.8	13.4	36.2	33.1
Total Combined District...	389,841	426,797	72,442	76,194	77,388	17,740	1972	1153	25.4	14.8	0.6	20.1	11.8	31.4	37.8

* Including deaths of persons belonging to District who died in Skipton Workhouse. + Exclusive of "Rural" cases in Workhouse.

NOTE.—The following were the rates for England and Wales during 1894:—Birth-rate, ; Death-rate, ; Zymotic-rate, ;
Percentage of deaths under 1 year to Registered Births,

TABLE VI.

TABLE showing Population, Births, and Deaths classified according to Disease, Age, and Locality, for the year 1894, in the Craven Combined Districts.

DISTRICT.	POPULATION AT ALL AGES.		Registered Births.	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.							MORTALITY FROM DISEASE, UNDER 5 YEARS AND ABOVE 5 YEARS.																							
	Census, 1881.	Census, 1891.		At all Ages.	Under 1 year.	1 and under 5	5 and under 15	15 and under 25	25 and under 60	60 and over.		Smallpox.	Measles.	Scarlatina.	Diphtheria.	Croup (not spasmodic).	Whooping Cough.	Continued Fever.			Diarrhoea and Dysentery.	Cholera.	Rheumatic Fever.	Erysipelas.	Pyæmia.	Puerperal Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	Other Diseases.	Influenza.	Hydrophobia.
																		Typhus.	Enteric or Typhoid.	Other or doubtful.														
Sedbergh Rural	4,079	4,040	109	72	12	5	...	3	11	41	Under 5	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	3	...	...	11	1	...
											5 upwards	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	1	9	9	1	29	3	...
Settle „	13,800	14,071	353	217	47	20	13	8	43	86	Under 5	1	2	2	...	1	2	...	...	...	...	...	1	...	...	...	1	16	...	1	40	...	...
											5 upwards	1	...	...	3	...	...	...	...	...	...	...	1	...	...	...	17	22	24	2	72	8	...
Skipton „	24,700	20,575	554	293	51	30	13	17	67	115	Under 5	...	1	...	...	1	1	...	1	...	3	...	...	...	...	...	3	27	1	1	41	...	...
											5 upwards	...	1	...	...	1	...	2	...	3	...	1	1	1	...	...	17	35	29	9	109	4	...
Keighley „	5,416	5,756	118	*72	11	8	5	5	18	25	Under 5	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	6	...	...	11	...	...
											5 upwards	1	...	1	...	...	...	3	...	...	...	3	...	...	...	...	5	7	5	2	25	1	...
Total Rural	47,995	44,442	1134	654	121	63	31	33	139	267		3	4	3	3	3	5	...	7	...	6	...	6	4	1	45	125	68	16	338	17	...
Skipton Urban	9,091	10,376	307	†148	35	24	4	6	33	46	Under 5	...	1	2	...	1	1	...	...	...	1	...	...	...	...	...	1	19	...	...	32	...	...
											5 upwards	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	13	19	14	4	37	2	...
Silsden „	3,329	3,866	99	60	11	8	3	4	11	23	Under 5	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	10	1	1	5	1	...
											5 upwards	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	3	7	12	1	16	...	...
Oakworth „	5,769	5,870	148	99	20	14	9	7	19	30	Under 5	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	15	1	1	15	...	...
											5 upwards	...	1	1	1	...	10	4	20	1	26
Haworth „	3,816	5,034	97	81	17	9	3	4	21	27	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11	...	...	14	...	1
											5 upwards	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	9	5	9	1	30	...	...
Oxenhope „	2,442	2,475	55	41	9	4	1	...	7	20	Under 5	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	9	...	...	3	...	...
											5 upwards	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	6	5	1	13	...	...
Barnoldswick „	4,028	4,131	132	71	21	7	3	2	15	23	Under 5	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	9	...	...	18	...	...
											5 upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	9	8	...	17	...	...
Total Urban	28,475	31,752	838	500	113	66	23	23	106	169		...	2	3	...	2	6	...	3	...	2	1	...	1	...	47	123	70	10	226	3	1
Total for whole Combined District	76,470	76,194	1972	†1154	234	129	54	56	245	436		3	6	6	3	5	11	...	10	...	8	...	6	5	1	1	...	92	248	138	26	564	20	1

† All Deaths in Union Workhouse included.

* This includes death from Smallpox belonging to Bingley Township Local Board District, which took place at the Morton Banks Hospital.

‡ This total includes all the deaths registered in Combined District, but contains 1 death belonging to the Bingley Township Local Board District.

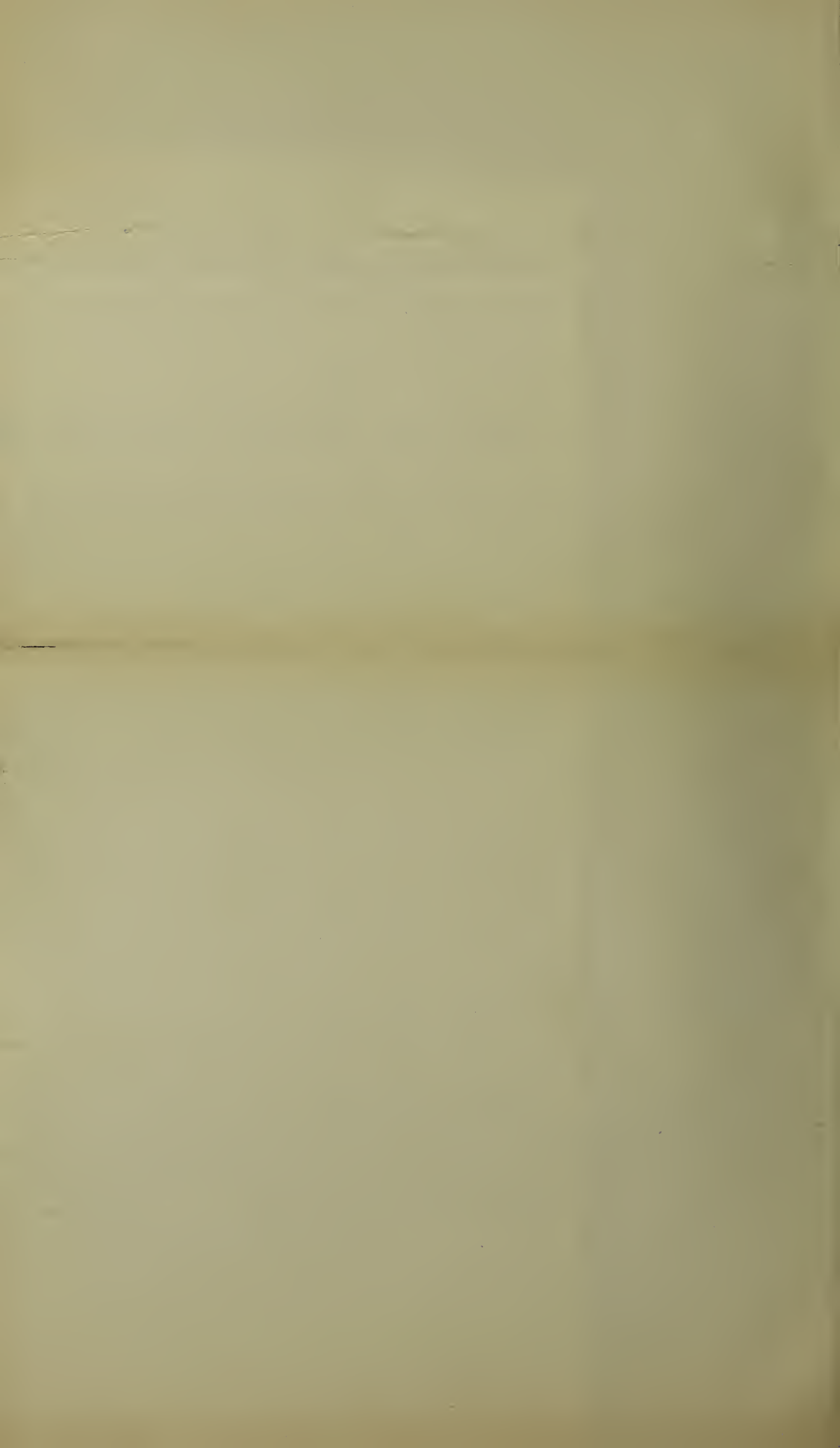


TABLE VII.

Showing the Birth and Death Rates in the Craven Combined District for each of the 17 years 1878—94.

YEAR.	Population Estimated.	Total Births.	Total Deaths.	Birth Rate per 1000 living.	Death Rate per 1000 living.	Zymotic Rate per 1000 living.	Infant Mortality per cent.	Deaths under 1 year, per cent. of total deaths.	Deaths under 5 years, per cent. of total deaths.	Deaths over 60 years, per cent. of total deaths.
1878.....	67,992	2,197	1,352	30.8	19.8	2.1	15.2	24.6	36.0	30.0
1879.....	69,268	2,188	1,390	31.5	20.0	2.4	12.7	20.1	32.2	30.5
1880.....	72,030	2,148	1,270	29.8	17.6	1.6	11.5	19.4	32.1	32.5
1881.....	^{Census.} 68,337	2,078	1,139	30.4	16.6	1.2	11.4	20.9	33.1	31.1
1882.....	68,410	2,070	1,263	29.8	18.1	1.5	12.4	20.4	33.9	28.1
1883.....	70,300	1,950	1,254	27.7	17.8	1.1	11.7	18.2	30.6	33.4
1884.....	70,800	2,057	1,215	29.0	17.1	0.8	11.2	19.0	29.0	33.3
1885.....	71,370	1,899	1,282	26.6	17.9	1.3	12.7	18.9	31.5	34.0
1886.....	72,180	2,097	1,190	29.0	16.4	0.8	11.1	19.6	29.6	33.1
1887.....	72,890	2,047	1,321	28.0	18.1	2.5	12.4	19.3	36.1	31.4
1888.....	73,680	2,136	1,307	28.9	17.7	1.1	13.4	22.0	30.8	33.3
1889	74,990	2,010	1,185	26.8	15.8	0.8	11.9	20.3	28.1	37.5
*1890	80,130	1,974	1,377	24.6	17.1	1.0	12.2	18.0	27.3	36.2
†1891	^{Census.} 72,063	1,995	1,380	27.6	19.1	1.1	13.1	19.0	28.9	37.2
†1892	72,400	1,908	1,220	26.3	16.8	1.5	12.7	20.0	31.0	37.6
†1893	76,964	2,048	1,298	26.6	16.8	1.3	12.3	19.4	29.0	36.5
†1894	77,388	1,972	1,154	25.4	14.9	0.6	11.8	20.1	31.3	37.9

* Including the Sedbergh Rural District.

† Excluding the Barnoldswick Urban District.

‡ Includes both.

COMBINED

SANITARY DISTRICTS OF CRAVEN.

FIFTEENTH

Annual Report

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

JOINT COMMITTEE,

1894.

Settle, February 9th, 1895.

SEDBERGH

RURAL DISTRICT COUNCIL.

Annual Report of the Medical Officer of Health for the Year 1894.

Area, 52,665 acres; *Rateable Value* (1894), £30,131; *Inhabited Houses* (1871), 986; (1891), 903; *Population enumerated* (1871), 4,990; (1881), 4,079; (1891), 4,040; *Estimated* (1894), 4,070.

Inspection of District.—This District has been regularly inspected during the past year, and special visits have been made where circumstances required. In Table VII will be found a list of nuisances abated, &c.

Sanitary Condition and Progress: Water Supply.—The town of Sedbergh is supplied with water from springs and a gathering ground of 137 acres on the side of Winder, one of the hills above the town. A large additional storage reservoir of a capacity of about 3,000,000 gallons was completed in 1886, but was subsequently found to leak, and it was decided that it was necessary to re-line it entirely. Application was made for sanction to a loan of £2,000 for this purpose. Sanction was given by the Local Government Board for a period of three years, and subsequently extended to five years. The Sanitary Authority, however, declined to carry out the necessary work under these conditions, and the work has not yet been done. Negotiations are proceeding with regard to the completion of the large reservoir, and it is very probable that this much desired work will be accomplished during the present year. The extension of the supply to the Millthrop property should then be considered. Small extensions of water mains have been laid this year, consisting of 122 yards of 3-inch pipes on the Millthrop Road, from opposite the School House to the gate of the new Vicarage, and one of 880 yards of 1-inch galvanized iron pipe along the Station Road to the Toll Bar House.

Considerable shortness of supply was again experienced in the months of May, June, and October. The water had to be turned off except between the hours of 8-0 a.m. to 10-0 a.m., and 5-0 p.m. to 10-0 p.m. Other parts of this Rural District are supplied by wells, springs, and running streams, and at Dent village the water is fetched from a central public fountain.

Sewerage and Drainage.—Sedbergh has a system of pipe sewers laid some fifteen years ago, but until this year no means had been adopted for dealing with the sewage at the two outfalls into the River Rawthay, a tributary of the Lune. This year this work has been completed, and I have to thank Mr. W. H. Radford, C.E., of Nottingham, the Engineer to the scheme, sanction to which was given in July of last year, for the following description of the work:—

"These works, which were commenced at the beginning of last year, are now completed. For the sewage disposal works $4\frac{3}{4}$ acres of land adjoining Birks Mill, on the banks of the river Rawthay, were purchased, and this has been laid out with carriers for distributing the sewage, after it has passed through the tank. The surface of the land has been levelled and laid out in ridges and furrows for the growth of crops. The land can be used either for sewage irrigation or as a land filtration area. The sewage will be delivered into the tank, which is a circular "Ives" tank (a novelty in this District), to intercept all the solid and floating matter before the sewage is turned on to the land. The tank can be used either with or without chemicals, but preferably with chemicals, in which case the land would be used as a land filtration area. The tank is worked on the upward flow principle, and the mud can be extracted without emptying the tank. From the disposal works a 12-inch outfall sewer has been laid across fields, dividing into two 9-inch branches, one to connect the present sewers in Sedbergh, and the other joining the present system at Settlebeck. This sewer follows the contour of the ground, and is laid chiefly across fields. There are about 1160 yards of 12-inch stoneware pipes and about 2170 yards of 9-inch pipes in the outfall sewers. In places where water has been met with, the pipes have been laid with patent water-tight joints. There are 31 man-holes and 15 lamp-shafts, and 8 inspection chambers in the fields where the sewer is laid at a shallow depth. Several of the man-holes are fitted with flush valves and will be used as flush chambers, the water for flushing being obtained from brooks. The sewers are ventilated by means of shafts up trees and sides of buildings. The contractors for the works were Messrs. Brassington Bros. and Corney, of Settle."

Matters remain as they were at Dent, and the plan prepared some time since for dealing with the sewerage of the village has been lost.

In other parts of the District where the houses are more scattered, the drains are for the most part constructed of rubble, and discharge into the nearest watercourse, and in a few instances they are laid in pipes and the sewage conveyed on to land.

Excrement and Refuse Disposal.—There are a number of water closets in Sedbergh. The common privy unction and the block privy are the two forms mostly in use throughout the district. The ash-pits are mostly uncovered, and frequently sunk below the level of the ground. The removal of nightsoil and ash-pit refuse rests with the occupiers of property, and is not frequently effected without the intervention of the Inspector. The nightsoil is disposed of to the farmers, and ashes and rubbish are taken to the town cricket field.

Infectious Hospital.—This Authority has no permanent hospital for the isolation of cases of infectious disease. Last year a barn on the Riggs was furnished as a temporary hospital for smallpox cases, and an iron building purchased and erected as an administrative block. There has been no occasion for using it during the past year.

Bye-laws and Urban Powers.—This Authority possesses bye-laws with respect to "Common Lodging Houses," and these were allowed by the Local Government Board in 1886; and has adopted the model bye-laws with respect to a "Cemetery" for the contributory place of Sedbergh. These last were allowed on May 9th, 1890. The Board has not yet applied for Urban Powers under Sections 157 and 158, and under Sections 169 (paragraphs 2 and 3) and 170. No regulations have been issued under the "Dairies, Cowsheds, and Milkshops Order, 1886." This year powers were granted by the Local Government Board under Section 49 of the Public Health Acts (Amendment) Act, 1890.

Sale of Food and Drugs Act, 1875.—Five samples of milk were taken by the Inspector of Nuisances, and submitted to the County Analyst. They were pronounced to be of superior quality.

Rainfall.—I am indebted to Mr. John Handley for details respecting the rainfall taken at Briggflats, near to Sedbergh:—

Year.				Rainfall in inches.
1884	....	....	....	45·83
1885	....	....	....	48·3
1886	....	....	....	63·06
1887	....	....	....	35·00
1888	....	....	....	41·11
1889	....	....	....	44·22
1890	....	....	....	54·02
1891	....	....	....	61·23
1892	....	....	....	58·87
1893	....	....	....	47·00
Average for 10 years				49·86
1894	....	....	....	54·05

The number of days on which ·01 or more inches fell was 210. The highest monthly record was for February (9·15), and the highest daily record (1·38) on December 21st.

Population.—At the census of 1871 the population was 4,990, and that of 1881 was 4,079, the decrease being due to the removal of the navvies on the completion of the Settle and Carlisle branch of the Midland Railway. At the census of 1891, it was found to be 4,040, living in 903 houses. I have estimated it up to the middle of 1894 to be 4,070, living in 975 houses, or an average of 4·1 per house.

Births.—The number of births registered during the year was 109 in number (60 males and 49 females). This is an increase of 16 upon last year, and is equivalent to an annual birth-rate of 26·7 per 1,000, as compared with 22·9 last year and 25·9 in 1892. The births were distributed as follows:—Sedbergh, 59; Dent, 33; and Garsdale, 17; giving respective birth-rates of 24·6, 28·8, and 31·7. The natural increase to the population is 37.

Deaths.—The total deaths returned were 72 in number (41 males and 31 females). This is an increase of 10 upon last year, and is equivalent to a death-rate of 17·6 per 1,000 living, as compared with 15·2 last year and 16·2 in 1892. The deaths were distributed as follows:—Sedbergh, 35; Dent, 33; and Garsdale, 4; giving respective death-rates of 15·0, 28·8, and 7·6.

The deaths occurred during each quarter as follows:—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
1889	25	11	16	19
1890	35	21	20	16
1891	16	24	18	12
1892	22	15	17	12
1893	15	16	15	16
1894	21	18	14	19

MORTALITY AS TO AGE.

	SEDBERGH.	DENT.	GARSDALE.	TOTAL.
Deaths under 1 year	6	5	1	12
„ over 1 and under 5..	1	3	1	5
„ „ 5 „ 15..	..	..	..	..
„ „ 15 „ 25..	3	..	..	3
„ „ 25 „ 60..	7	4	..	11
„ „ 60	18	21	2	41
At all ages	35	33	4	72

Tables of the Mortality and Sickness in the Rural Sanitary District of Sedbergh for the twelve calendar months ending December 31st, 1894 :—

NAME OF DISEASE.	(A) TOTAL DEATHS REGISTERED IN THE DISTRICT.							
	SEDBERGH.		DENT.		GARSDALE.		SEDBERGH R.S.D.	
— 5 means under 5 years of age	- 5	+ 5	- 5	+ 5	- 5	+ 5	- 5	+ 5
+ 5 means over 5 years of age.....								
Smallpox.....	..	..	..	..	..	..	..	..
Measles .....	..	..	..	..	..	..	..	..
Scarlatina .....	..	..	..	..	..	..	..	..
Diphtheria .....	..	..	..	..	..	..	..	..
Croup (not “spasmodic”) .....	..	..	..	..	..	..	..	..
Whooping Cough .....	..	..	..	..	..	..	..	..
“Continued” } Typhus .....	..	..	..	..	..	..	..	..
Fevers. { Enteric or Typhoid .....	..	..	1	..	..	..	1	..
{ Of other or doubtful sorts .....	..	..	..	..	..	..	..	..
Diarrhœa and Dysentery .....	..	..	..	..	..	..	..	..
Cholera .....	..	..	..	..	..	..	..	..
Rheumatic Fever .....	..	1	..	..	1	..	1	1
Erysipelas .....	..	..	1	..	..	..	..	1
Pyæmia .....	..	..	..	..	..	..	..	..
Puerperal Fever.....	..	..	..	..	..	..	..	..
Ague .....	..	..	..	..	..	..	..	..
Influenza	1	1	..	2	..	..	1	3
Phthisis .....	..	..	1	1	..	..	1	1
Bronchitis, Pneumonia, and Pleurisy	2	5	1	3	..	1	3	9
Heart Disease .....	..	4	..	5	..	..	..	9
Injuries .....	..	1	..	..	..	..	..	1
Diseases not named above	4	16	6	12	1	1	11	29
Total.....	7	28	8	25	2	2	17	55

NAME OF DISEASE.	(B) OUT-DOOR SICKNESS.							
	SEDBERGH.		DENT.		GARSDALE.		SEDBERGH R.S.D.	
	- 5	+ 5	- 5	+ 5	- 5	+ 5	- 5	+ 5
- 5 means under 5 years of age..... }								
+ 5 means over 5 years of age								
Smallpox
Measles
Scarlatina	1	3	..	..	1	3
Diphtheria	1	..	..	..	1
Croup (not "spasmodic")
Whooping Cough.....
"Continued" } Typhus
Fevers. } Enteric	1	..	..	..	1

Diarrhoea and Dysentery.....
Cholera
Rheumatic Fever
Erysipelas.....
Pyæmia
Puerperal Fever
Ague
Total.....	1	5	..	..	1	5

TABLE I.

Table showing the estimated population, births, and deaths, for the years 1880-1894 inclusive, with an average for the decade 1880-89:—

Year.	Population estimated to middle of the year.	Births.	Deaths.
1880	4079	137	64
1881	4079	112	63
1882	4100	101	68
1883	4100	95	81
1884	4100	100	54
1885	4150	113	78
1886	4180	109	70
1887	4200	94	66
1888	4220	93	54
1889	4240	112	71
Average for decade 1880-89	4144	106	66
1890	4260	84	92
1891	4040	106	70
1892	4050	105	66
1893	4060	93	62
1894	4070	109	72

TABLE II.

Table showing the annual birth-rate, rates of mortality, death-rates among children, and deaths in public institutions, during the twelve years 1883-94 inclusive, and the average for the decade 1880-89 :—

Year.	Birth-rate per 1000 of the Population.	Annual Rate of mortality per 1000 living.	Deaths of Children un- der 1 year ; percentage of total deaths.	Percentage of deaths of Children un- der 1 year to registered births.	Deaths of Children un- der 5 years ; percentage of total deaths.	Total number of deaths in Public Insti- tutions.
1883	23·1	19·7	16·0	13·6	18·5	4
1884	24·3	13·1	12·9	7·0	18·5	3
1885	27·2	18·7	14·1	9·7	25·6	7
1886	26·0	16·7	15·5	10·0	20·0	1
1887	22·3	15·7	21·2	14·8	28·7	3
1888	22·0	12·8	16·6	9·6	22·2	3
1889	26·4	16·7	15·4	9·8	16·9	1
Mean for decade 1880-89.	25·6	16·0	15·0	9·6	21·2	2·9
1890	19·7	21·5	11·9	13·0	15·2	3
1891	26·2	17·3	11·4	7·5	14·2	1
1892	25·9	16·2	21·2	13·3	24·2	10
1893	22·9	15·2	17·7	11·8	27·4	1
1894	26·7	17·6	16·6	11·0	23·6	3

The birth-rate is above the average, and has only been exceeded in the year 1885. The death-rate is also above the average, and has only been higher in the years 1883, 1885, and 1890. Of the total deaths, however, 56·9 per cent. were those of persons aged 60 years and upwards, or 41 out of 72. The infant mortality and the percentage to total deaths of children under 1 and under 5 years, although below those of the two previous years, are above the average.

TABLE III.

Table showing number of deaths certified by registered medical practitioners, un-certified deaths, and inquests, with their percentage to total deaths, during 1894 :—

	Deaths.			Percentage to Total Deaths.
	Sedbergh	Dent	Garsdale	1894
Certified	34	30	3	93·0
Uncertified .....	..	3	..	4·1
Inquests	1	..	1	2·7

The three uncertified deaths in Dent were a woman aged 72, from “old age and paralysis,” a woman aged 75 of “supposed heart disease,” and an infant one day old, of “supposed convulsions.”

TABLE IV.

Table showing the mortality from certain classes of diseases, and proportions to population and to 1,000 deaths, for 1894.

	Total Deaths.	Deaths per 1,000 of population.	Proportion of deaths to 1,000 deaths.
1. Seven Principal Zymotic Diseases.....	1	0·2	13·8
2. Pulmonary Diseases (other than Phthisis)	12	2·9	166
3. Tubercular Diseases	3	0·7	41·6
4. Wasting Diseases of Infants	5	1·2	69·4
5. Convulsive Diseases of Infants	4	0·9	55·5

NOTES.

1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, Diarrhoea and Dysentery.

3. Includes Phthisis, Scrofula, Rickets, and Tabes.

4. Includes Marasmus, Atrophy, Debility, Want of Breast-milk, and Premature Birth.

5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

Among the above classes of disease there is a slight increase this year in the deaths from Pulmonary diseases, which had been decreasing during the previous four years. There is a considerable reduction in the deaths from Tubercular diseases, which last year reached the highest number on record. Those due to Wasting and Convulsive diseases of infants are about the average.

TABLE V.

Table showing the number of deaths from the seven principal Zymotic Diseases during the three years 1892, 1893, and 1894.

Disease.	Deaths.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894
Smallpox	1	..	..	15·1	..	..
Measles .....	..	..	..	..	..	..
Scarlet Fever .....	..	..	..	..	..	..
Diphtheria	1	..	..	15·1	..	..
Whooping Cough.....	1	..	..	15·1	..	..
Fever.....	1	1	1	15·1	16·1	13·8
Diarrhoea .....	..	5	..	..	80·6	..
Totals	4	6	1	60·6	96·7	13·8

Only one death was returned under the head of zymotic disease, as against 6 last year, and 4 in 1892. This is equivalent to a zymotic rate of 0·2 per 1,000 living. Six certificates were received under the Infectious Diseases (Notification) Act, 1889, as compared with 35 last year.

All the cases of infectious disease this year occurred in the Dent township.

Scarlatina.—Three mild cases of scarlatina occurred in one house at Gibbs Hall, Dent, in January, and a single case at Well Head, Dent, in May. There was no clue to their origin, and the disease did not spread any further.

Diphtheria.—A single case of diphtheria was reported in a girl of nine years living in Dent village. The house had no slopstone in it, but slopwater was poured into a hole in a rubble drain close to the house, from which percolation would take place into the foundations.

Typhoid Fever.—A death was returned from typhoid fever, in a man of 57 (the registrar of births and deaths for the District). There was no defective drainage apparent on the premises themselves, but the house is situated in near proximity to the Flintergill Beck, which acts as the common sewer for the village, and the condition of which at the time was very foul. I reported again to the Sanitary Authority on its condition, which was worse than I had ever seen it, and cannot be remedied in times of drought, until a proper sewerage system for Dent village is provided.

Erysipelas.—A death was returned from erysipelas in October, that of a woman aged 81, in Dent village.

Influenza.—Four deaths were registered from influenza and its complications. Two of them occurred in Sedbergh, in persons aged six months and 55 years respectively, in April and July; and two in Dent, in aged persons, in May and August.

TABLE VI.

Table showing the population, births, deaths, birth-rates, death-rates, and percentages of deaths, at certain ages and for certain diseases, in each township of the District during 1894.

Township.	Population.	Births.	Deaths.	Annual Rate per 1000 living.			Percentage of deaths under 1 year to total deaths.	Percentage of deaths under 1 year to registered births.	Percentage of deaths under 5 years to total deaths.	Percentage of deaths of persons aged 60 and upwards to total deaths.	Percentage of deaths to total deaths.			
				Births.	Deaths.	Deaths from 7 principal Zymotic Diseases.					From Violence.	Phthisis.	Bronchitis, Pneumonia, Pleurisy.	Heart Disease.
Sedbergh	2392	59	35	24·6	15·0	..	17·1	10·1	20·0	51·4	2·8	..	20·0	11·4
Dent	1143	33	33	28·8	28·8	0·8	15·1	15·1	24·2	63·6	..	6·0	12·1	15·1
Garsdale	535	17	4	31·7	7·6	..	25·0	5·8	50·0	50·0	..	..	25·0	..
Sedbergh Rural } Sanitary District }	4070	109	72	26·7	17·6	0·2	16·6	11·0	23·6	56·9	1·3	2·7	16·6	12·5

The highest death-rate is found in Dent, and this is higher than it has ever been, though 63·6 per cent. of the deaths were those of persons over 60. It has also the highest infant mortality-rate.

TABLE VII.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c., completed in the year ending December 31st, 1894 :—

	Sedbergh.	Dent.	Garsdale.	Grisdale.	Marthwaite.	Cantley.	TOTAL.
Number of Complaints received.....	1	1	0	0	0	0	2
Number of Houses, Premises, &c., inspected	146	55	1	1	4	2	209
House Drains repaired, cleansed, &c.	31	4	0	0	0	1	36
„ trapped and ventilated	8	2	0	0	0	1	11
Privies and Water Closets repaired, cleansed, &c. ..	9	14	0	0	0	0	23
„ supplied with water	1	0	0	0	0	0	1
Water Closets provided	4	0	0	0	0	0	4
Privies provided	0	0	0	0	2	0	2
Water Supply, Houses provided with	14	0	0	0	0	0	14
Ashpits repaired, covered, &c.	1	1	0	0	0	0	2
Number of Ashpits ordered to be emptied	46	24	0	0	0	0	70
Removal of accumulation of dung, stagnant } water, animal and other refuse	14	0	0	0	0	0	14
Removal of animals improperly kept.....	1	1	0	0	0	1	3
Filthy Houses ordered to be cleansed	1	0	0	0	0	1	2
Overcrowding	3	0	1	0	0	0	4
Samples taken under “Sale of Food and Drugs Act”	5	0	0	0	0	0	5
Houses disinfected after infectious disease	1	4	0	0	0	0	5
Slaughter Houses inspected	3	0	0	0	0	0	3
Bakehouses inspected	4	0	0	0	0	0	4
Cowsheds inspected	10	0	0	0	0	0	10

JAMES WADESON, Inspector of Nuisances.

Common Lodging-Houses, Slaughter-Houses, &c.—There is at present no *Common Lodging-House* in the District. The three *Slaughter-houses* are not registered, and the Authority possesses no bye-laws with respect to them. There are 10 *Dairies and Cowsheds* entered on the register, but no regulations have been issued for their proper control. Four instances of *Overcrowding* were reported, and steps taken for their abatement. No instance of *Unsound Meat* exposed for sale came to my knowledge. There are no *Noxious Trades*.

The matters requiring the attention of the Authority are :—

- 1.—The completion of the Sedbergh Waterworks, and the extension of the supply, if thought advisable, to the hamlet of Millthrop.
- 2.—The carrying out of the recommendations contained in the special report upon Dent.

- 3.—To consider the undertaking by the Sanitary Authority, or by contract under the Sanitary Authority, of the regular and proper removal of night-soil and ashpit refuse in the town of Sedbergh.
- 4.—To make application for Urban Powers under Sections 157 and 158, and under Sections 169 (paragraphs 2 and 3) and 170 of the "Public Health Act, 1875"; and to adopt some form of regulations under the "Dairies, Cowsheds, and Milkshops Order, 1886," and enforce the same.

FRANCIS E. ATKINSON, L.R.C.P., London, M.R.C.S.,
Medical Officer of Health.

The Sedbergh Rural District Council,
March, 1895.

SEDBERGH

RURAL DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

1894.

SETTLE

RURAL DISTRICT COUNCIL.

Annual Report of the Medical Officer of Health for the Year 1894.

Area, 151,942 acres; *Rateable Value* (1894), £131,085; *Inhabited Houses* (1871), 2,977; (1881), 2,854; (1891), 2,873; *Population enumerated* (1871), 15,134; (1881), 13,800; (1891), 14,071; *Estimated* (1894), 14,160.

Inspection of District.—During the past year all parts of this District have been visited and inspected with more or less frequency, as circumstances required, by myself and the Inspector of Nuisances, and special visits have been made in connection with outbreaks of infectious disease. Special house-to-house surveys have been undertaken of the townships of Stainforth, Clapham-cum-Newby, and Longpreston, and a report on the former was presented in November last.

Sanitary Condition and Progress: Water Supply.—Schemes of public water supply have during recent years been carried out by the Sanitary Authority for Settle, Giggleswick, and Stackhouse, Ingleton, and High and Low Bentham. The villages of Longpreston and Burton-in-Lonsdale have been supplied by private companies. At Clapham, the village is supplied from the lake by the principal owner of property. The hamlets of Hanlith, Halton West, Litton, Halton Gill, and Foxup have water piped into the houses. At Langcliffe and Stainforth the supply is piped to watering places in the village, from which it is fetched by the inhabitants. Arncliffe, Scosthop, and Kirkby-Malham have village pumps. Other places in the District are dependent for their water supply upon springs, wells, and running streams.

With reference to the *Settle, Giggleswick, and Stackhouse* water supply, no agreement has yet been arranged with the owners of property in Stockdale with a view to taking water from this source for the augmentation of the public supply, and latterly it was decided to leave the matter over until the new District Council should come into force. The Deacon's waste water meter put in last year has been serviceable in detecting a large number of leakages throughout the system, chiefly occurring in the service pipes, and these were remedied at the time. Thereby a large saving of water has been effected. Shortness of supply was threatened in September, but this was happily averted by the turning off of the water from the mains during the night, from September 24th to October 25th.

At *Bentham* the work in connection with an improvement in the water supply to Fowgill, Lairgill, and Robin Lane was carried out early in the year, and consists in the laying of 1,567 yards of 3-in. iron pipes. The result of this alteration in the system has been very beneficial to the consumers on the higher level.

At *Ingleton* an extension of water main was laid from New Road to Kirksteads, consisting of 1,050 yards of 3-in. iron pipes.

At the close of last year the property owners in *Newby* were offered the opportunity of themselves carrying out the scheme for supplying the hamlet with water. Early in the present year Mr. Bateman offered, on behalf of Mr. Farrer, of Ingleborough Hall, to provide a scheme; but on the Sanitary Authority's requesting to be provided with a plan of the proposed works, a letter was received from Mr. Bateman at the end of April stating that Mr. Farrer, after careful consideration, had decided not to carry out a scheme, owing to some of the property owners at Newby being of opinion that a water supply was unnecessary. Notwithstanding this, abundant evidence was forthcoming during a second survey this year, that for some months during the year the inhabitants have suffered from deficient supply, and what water was available had to be fetched an unreasonable distance; otherwise, water from sources liable to pollution had to be used. At the June meeting of the Sanitary Authority it was decided to adjourn the consideration of providing a water supply for Newby *sine die*.

Sewerage and Drainage.—Complete systems of sewerage has been carried out during recent years by the Sanitary Authority for Settle, Giggleswick, Langeliffe and Stackhouse, Ingleton, and High and Low Bentham. In all cases the sewage is dealt with by irrigation, and the main sewers are ventilated and periodically flushed by means of Field's self-acting flushing tanks. The drainage of Burton-in-Lonsdale was partially improved by the Sanitary Authority in 1885. The sewerage of Longpreston was laid in pipes some years since by private subscription, but the work was irregularly done, and no provision was made for dealing with sewage at the outfall. In August of last year Mr. A. E. Preston was consulted as to the best means of dealing with the sewage at the outfall at the south end of the village where it discharges into the beck. The first site he selected was objected to by local property owners, and two others were subsequently submitted to him. The site selected by the Engineer for the sewage-disposal of Longpreston, in January last, is land belonging to the endowment of Longpreston School, and vested in Trustees, and, as there are vacancies in this body, the Sanitary Authority has to wait for their appointment before it is in a position to treat for the acquirement of this land. A letter was read at the meeting of the Sanitary Authority on September 25th, from the County Council, asking why no action had been taken in the matter, and the above was the reason given for the delay. The County Council then threatened legal proceedings unless a definite scheme were submitted by December 10th ult.

At *Hellifield* difficulties have been met with throughout the year in connection with sub-soil water in large quantities getting into the main outfall sewer. In consequence of this the works have not yet been completed or handed over by the Engineer to the Sanitary Authority.

At *Newby* the property owners declining to take action in the matter, the Sanitary Authority instructed Mr. Foxcroft to prepare a small scheme for the proper sewerage and sewage disposal of Newby. This was presented on the 10th of April last, and estimates for the works and probable compensation were subsequently submitted. Some correspondence passed, and difficulties were experienced with regard to the acquirement of land for sewage disposal. The question has been frequently discussed and adjourned. At the Sanitary Authority's meeting, on September 25th, a letter was received from the County Council, asking what steps the Sanitary Authority proposed to take with regard to both water supply and sewerage of Newby.

At *Stainforth* complaints were made by Mr. William Foster to the Local Government Board, in April last, as to the unsanitary condition of the drainage of the village and the absence of proper means of sewerage, and copies of the correspondence were forwarded by the Local Government Board to the Sanitary Authority. After a further letter in May, a committee was appointed to report on the matter. After this the Clerk was directed to instruct the overseers to convene a meeting of owners and ratepayers at Stainforth, to con-

sider the desirability of carrying out a scheme of sewerage for the village. On the 5th of June the result of this meeting was reported, embodying a request from the ratepayers that the Sanitary Authority should postpone any action in providing a sewerage scheme, which was considered by them to be unnecessary. A copy of their reasons was forwarded to the Local Government Board. On September 21st, the County Council wrote to the Sanitary Authority requesting that steps should be taken without undue delay to provide a scheme for the proper sewerage of Stainforth. On October 23rd a further letter was read from the Local Government Board, enclosing copy of a further letter from Mr. W. Foster, and requesting that the Medical Officer of Health should prepare a report on the sanitary condition of Stainforth. I then instructed Mr. Foxcroft to make a house-to-house survey of the township, upon which I based a Special Report, which was presented to the Sanitary Authority on November 20th, and copies of which were forwarded to the Local Government Board and County Council in accordance with their General Order. To this report I must refer you for further details.

In places where a system of sewerage has not been carried out, the rubble highway drains are used as sewers, and these empty into the nearest watercourse. The private drainage is also of rubble, except in the case of recent erection, and where the drainage of old property has been altered.

Excrement and Refuse Disposal.—The common privy-midden is the method of excrement disposal mostly in use throughout the District. In those places where sewers have been provided, water-closets have in many instances been substituted. There are a few ash-closets and privies furnished with movable receptacles. All new privies are constructed in accordance with the bye-laws in force. The Sanitary Authority does not undertake the removal of refuse in any part of the District; this is dependent upon the tenants, and is fairly well done. Difficulty is at times experienced in getting rid of the refuse. Public tips for dry ashes and rubbish were provided last year at High and Low Bentham.

Bye-Laws and Urban Powers.—This Authority possesses Urban powers under Section 39 of the Public Health Act, 1875, for Bentham, Ingleton, Longpreston, and Settle; under Sections 42 and 45 for Bentham, Ingleton, Longpreston, Settle, Giggleswick, Langeliffe, Burton-in-Lonsdale, and Hellifield; under Sections 157 and 158 for Bentham, Ingleton, Longpreston, Settle, Giggleswick, Langeliffe, Burton-in-Lonsdale, and Hellifield; and under Sections 169 (paragraphs 2 and 3) and 170 for Bentham, Ingleton, Longpreston, Settle, Giggleswick, Burton-in-Lonsdale, Thornton-in-Lonsdale, Clapham-cum-Newby, Austwick, and Stainforth. The Authority has also adopted a code of bye-laws in accordance with the Models with respect to "Slaughter-houses," "New Streets and Buildings," and with respect to the "Management of a Cemetery" for Ingleton. They adopted the Model Bye-Laws with respect to Common Lodging-houses, and these were allowed in 1888. In 1891 an Order was obtained putting in force the provisions of Section 49 of the Public Health Acts (Amendment) Acts, 1890, within the contributory places of Bentham, Giggleswick, Ingleton, and Settle. A series of Regulations under the Dairies, Cowsheds, and Milkshops Order, 1886, was adopted by the Authority, and came into force on January 1st, 1890. Since the death of Mr. Millington, late Inspector of Nuisances for this District, who also was appointed Inspector under the Dairies and Cowsheds Order, no fresh appointment has been made to this office. In June last the matter was represented to and discussed by the Sanitary Authority, but it decided to make no appointment. The Order, therefore, has been a dead letter in this District.

Clapham and Austwick Burial Grounds.—During this year new burial grounds have been constructed, and the grounds laid out at Clapham and Austwick. Both were provided as extensions of the churchyard under the Home Office. The grounds were consecrated by the Bishop on Wednesday, May 23rd, and some interments have taken place.

Infectious Hospital at Giggleswick.—This hospital has been used during the year for isolation of nine cases of smallpox, and ten cases of scarlatina. In January the Sanitary Authority considered a series of recommendations I had made with regard to the improvement of the hospital. They had been referred to a committee who met on the premises. The Sanitary Authority decided to enlarge the existing kitchen, provide a concrete floor, and put in a new kitchen range, and to glass the boundary walls at several points. This work was done in February. Action with reference to the other recommendations was adjourned. No proper ambulance for the removal of cases has yet been obtained.

River Pollution.—A pollution of the river Doe at Ingleton by gas tar was reported in May, and iron tanks were fixed to receive and store the tar. A pollution of the Ribble by solid refuse at the Settle Gas Works was abated after notice in April, and road sweepings having been deposited in the Ribble at Settle Bridge by the Highway Board, a notice was served by the Sanitary Authority prohibiting this in future.

Population.—At the census of 1871 the population of this District was 15,134, living in 2,977 houses; and that of 1881 was 13,800, living in 2,854 houses. At the census of 1891 it was found to be 14,071, living in 2,873 houses, or an average of 4·8 per house. I have estimated it up to the middle of 1894 to be 14,160, living in 2,947 houses, or an average of 4·8 per house.

A. Bentham Sub-District.—Area, 46,296 acres; population (1871) 6,554, (1881) 5,458, (1901) 5,437; includes the townships of Thornton-in-Lonsdale, Burton-in-Lonsdale, Bentham, Ingleton, and Clapham-cum-Newby.

Year.	Births registered.	Birth-rate.	Deaths of Children under 1 year of age.	Deaths of Children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Nuisances abated during year.
1884	194	34·5	16	8·2	89	15·8	41	...	...	...	...	2	...	...	401
1885	164	29·0	16	9·7	97	17·1	42	...	8	1	...	...	2	...	192
1886	190	33·3	27	14·2	95	16·6	28	...	4	...	...	...	...	1	150
1887	182	31·6	8	4·3	75	13·0	31	...	...	...	...	...	...	...	51
Average for Decade 1878-87.	181	30·7	19	10·5	91	15·5	33	...	1·5	0·9	...	0·9	0·9	0·8	...
1888	175	30·1	24	13·7	95	16·3	38	...	1	...	...	1	1	2	71
1889	159	27·2	19	11·9	95	16·2	29	...	...	...	2	1	...	1	94
1890	155	26·3	18	11·6	98	16·6	41	...	...	3	...	3	...	...	97
1891	157	28·8	15	9·5	97	17·8	42	...	1	1	...	...	2	1	111
1892	141	25·8	29	20·5	99	18·1	34	...	...	...	M. Crp. 1	2	1	...	68
1893	165	30·2	23	13·9	91	16·6	34	...	...	1	2 Crp. 3	1	...	...	42
1894	146	26·7	19	13·0	86	15·7	32	1	...	2	1	1	...	...	120

The number of births in this sub-district is, with one exception (1892), the lowest annual number recorded, and the birth-rate is, therefore, much below the average. The death-rate is lower than it has been for the previous six years, though a trifle above the mean for the previous decade. The death from small-pox was that of a man from Newby who died in the Giggleswick Hospital. The two deaths from scarlatina occurred at High Bentham in June, and at Burton-in-Lonsdale in December. Those from diphtheria and whooping cough took place in Clapham.

B. Settle Sub-District.—Area, 49,018 acres; population (1871) 5,982, (1881) 5,598, (1891) 5,763; includes the townships of Austwick, Lawkland, Horton-in-Ribblesdale, Langcliffe, Stainforth, Settle, Giggleswick, and Rathmell.

Year.	Births registered.	Birth-rate.	Deaths of Children under 1 year of age.	Deaths of Children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Nuisances abated during year.
1884	159	27.7	14	8.8	79	13.7	28	...	..	...	...	1	...	...	169
1885	144	24.9	18	12.5	94	16.2	35	...	...	...	3	2	3	...	138
1886	185	31.8	8	4.3	71	12.2	30	...	..	...	...	...	1	1	155
1887	133	31.3	12	6.5	66	11.2	24	...	1	1	...	...	...	...	149
Average for Decade 1878-87.	174	29.9	17	10.1	85	14.7	33	...	0.7	0.8	0.6	0.6	2.2	0.8	...
1888	182	30.9	24	13.1	91	15.4	26	...	...	...	8	...	2	...	119
1889	152	25.6	18	11.8	95	16.0	42	...	...	...	3	2	..	1	267
1890	152	25.5	16	10.5	84	14.1	27	...	...	...	...	2	...	...	194
1891	149	25.8	24	16.1	101	17.5	33	...	3	...	...	...	..	1	221
1892	167	28.9	15	8.9	79	13.6	37	...	1	...	...	2	...	...	133
1893	152	26.2	19	12.5	71	12.2	31	...	...	1	1	...	...	3	115
1894	147	25.3	21	14.2	80	13.8	26	1	2	...	3	1	...	...	102

Here again the number of births is, with one exception, the lowest recorded, and the birth-rate has only been lower in the year 1885. The death-rate is also below the average, but not so low as it has been in the past two years. The infant mortality is, however, above the average, and has only been higher in 1891. The death from small-pox occurred in the Giggleswick Hospital. The two deaths from diphtheria occurred at Settle and Langcliffe, and that from membranous croup in Giggleswick. Those from measles took place in Lawkland and Giggleswick, and that from whooping cough at Settle.

C. Longpreston Sub-District.—Area, 16,297 acres; population (1871) 1,372, (1881) 1,620, (1891) 1798; includes the townships of Tosside, Wigglesworth, Longpreston, Hellifield, West Halton, Swinden, and Nappa.

Year.	Births registered.	Birth-rate.	Deaths of children under 1 year of age.	Deaths of children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Nuisances abated during year.
1884	57	33.8	4	7.0	25	14.8	13	...	...	...	1	...	...	1	28
1885	48	22.2	4	8.3	23	13.4	8	...	...	1	...	...	2	...	52
1886	45	26.0	2	4.4	27	15.6	14	...	...	...	...	...	1	...	45
1887	51	29.1	2	3.9	24	13.7	16	...	...	...	...	...	...	1	26
Average for Decade 1878-87.	45	28.1	3.8	8.7	24	15.6	11	...	...	0.1	0.1	0.4	0.4	0.3	...
1888	56	31.7	7	12.5	36	20.4	12	...	...	...	...	...	...	...	37
1889	47	26.3	3	6.3	28	15.7	16	...	...	...	...	1	...	...	112
1890	41	22.8	2	4.8	24	13.4	8	...	3	...	...	...	...	...	107
1891	49	27.2	6	12.2	35	19.4	20	...	...	...	...	...	...	...	121
1892	41	22.6	2	4.8	20	11.0	12	...	...	...	...	1	...	...	22
1893	42	23.2	3	7.1	22	12.1	10	...	...	...	1	...	...	...	6
1894	40	22.0	3	7.5	29	15.9	17	...	...	...	...	...	...	...	69

The birth-rate for this sub-district is the lowest recorded. The death-rate is above the average, but this is partly accounted for by the high percentage of deaths of persons over 60 years of age, amounting to 58.6.

D. Kirkby Malham Sub-District.—Area, 22,328 acres; population (1871) 878, (1881) 762, (1891) 753; includes the townships of Otterburn, Airton, Scoothrop, Kirkby Malham, Hanlith, Malham, and Malham Moor.

Year.	Births registered.	Birth-rate.	Deaths of Children under 1 year age.	Deaths of children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhœa.	Nuisances abated during year.
1884	27	34.3	2	7.4	15	19.0	8	...	...	...	...	...	...	...	10
1885	24	29.7	2	8.3	5	6.1	...	...	...	...	...	...	1	...	8
1886	19	22.9	...	...	10	12.0	4	...	...	...	...	...	...	...	11
1887	21	24.7	1	4.7	11	12.9	4	...	...	...	...	...	1	...	8
Average for Decade 1878-87.	19	23.5	1.9	9.4	12	15.5	4.9	...	...	0.2	...	...	0.3	...	...
1888	19	21.9	4	21.0	14	16.1	6	...	...	...	...	...	...	...	2
1889	12	13.6	...	...	4	4.5	2	...	...	...	...	...	...	...	4
1890	23	25.7	1	4.3	12	13.4	6	...	...	...	...	...	...	...	5
1891	24	31.8	2	8.3	17	22.5	8	...	...	...	...	...	...	...	22
1892	9	11.9	2	22.2	14	18.5	5	...	...	1	...	...	...	...	11
1893	22	28.9	4	18.1	12	15.7	4	...	...	...	...	...	...	...	6
1894	12	15.6	2	16.6	10	13.0	4	...	...	...	...	...	...	...	5

Here both birth and death-rates are below the average.

E. Arncliffe Sub-District.—Area, 18,008 acres; population (1871) 348, (1881) 362, (1891) 320; includes the townships of Hawkswick, Arncliffe, Litton, and Halton Gill.

Year.	Births registered.	Birth-rate.	Deaths of children under 1 year age.	Deaths of children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Smallpox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhœa.	Nuisances abated.
1884	11	28.7	...	...	1	2.6	1	...	...	...	...	...	...	...	8
1885	5	12.7	1	20.0	10	25.5	5	...	...	...	...	...	...	1	...
1886	11	27.3	...	...	3	7.4	3	...	...	...	...	...	...	...	...
1887	5	12.1	...	...	4	9.7	3	...	...	...	...	...	...	...	9
Average for Decade 1878-87.	8	25.1	0.6	5.0	5.4	13.9	2.7	...	...	...	...	0.1	...	0.1	...
1888	3	7.1	1	33.3	9	21.3	5	...	...	...	...	...	...	...	...
1889	5	11.3	1	20.0	6	13.8	4	...	...	...	...	...	...	...	4
1890	3	6.7	...	...	3	6.7	2	...	...	...	...	...	...	...	8
1891	5	15.6	...	...	2	6.2	...	...	...	...	...	...	...	...	...
1892	5	15.6	...	...	3	9.3	1	...	...	...	...	...	...	...	4
1893	5	15.6	...	...	5	15.6	5	...	...	...	...	...	...	...	5
1894	8	25.0	...	...	1	3.1	1	...	...	...	...	...	...	...	3

The birth-rate is much higher than it has been since 1886. Only one death was registered in this sub-district, and it occurred on the 1st of January.

Births.—The total births registered were 353 in number (197 males and 156 females). This is a decrease of 33 from last year, and is equivalent to an annual birth-rate of 24·9 per 1000 living, as compared with 27·3 last year, and 25·7 in 1892. The natural increase to the population is 136.

Deaths.—The total deaths returned were 217 in number (117 males and 100 females), including nine which took place in the Giggleswick Workhouse, and two in the Fever Hospital. This is an increase of 11 upon last year, and is equivalent to a death-rate for the year of 15·3 per 1000 living, as compared with 14·5 last year, and 15·5 in 1892.

Ages at Death.—Among children under one year of age there were 47 deaths, as compared with 49 and 48 in the two preceding years. This gives a percentage to total deaths of 21·5, and an infant mortality of 13·3 per cent. of registered births. Among children under five years there were 67 deaths, as against 66 and 57 in the last two years. This gives a percentage to total deaths of 30·7. Among persons aged 60 years and upwards there were 86 deaths, as compared with 85 last year, and 90 in 1892. This gives a percentage to total deaths of 39·6.

The deaths were distributed in each quarter as follows :—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
1884	47	55	66	52
1885	74	51	44	66
1886	67	57	40	50
1887	47	57	40	44
1888	76	65	46	65
1889	67	52	59	64
1890	68	57	40	63
1891	66	85	50	61
1892	82	64	37	36
1893	48	49	42	67
1894	76	48	35	58

Deaths in Public Institutions are included in the above figures.

The following Tables, I. to VI., are, for the sake of comparison, uniform with those of previous years :—

TABLE I.

Table showing the births, deaths, and marriages for the years 1884-94 inclusive, with the average for the ten years, 1878-87 :—

Year.	Births.	Deaths.	Marriages.
1884	449	220	82
1885	385	235	108
1886	450	214	100
1887	441	188	78
Average for decade 1878-87.	428	231	93
1888	435	252	76
1889	378	242	77
1890	376	228	84
1891	384	262	99
1892	363	219	94
1893	386	206	89
1894	353	217	87

The number of births is the lowest on record, but the deaths show a slight increase upon last year.

TABLE II.

Table showing the annual birth-rate, rates of mortality, death-rates among children, and deaths in public institutions, during the eleven years 1884-94 inclusive, and the average for the decade 1878-87:—

Year.	Birth-rate per 1000 of the Population.	Annual Rate of mortality per 1000 living.	Deaths of Children under 1 year; percentage of total deaths.	Percentage of deaths of Children under 1 year to registered births.	Deaths of Children under 5 years; percentage of total deaths.	Total number of deaths in Public Institutions.
1884	31.6	15.4	15.4	8.0	23.6	11
1885	26.8	16.3	17.4	10.6	29.7	6
1886	31.1	14.7	17.2	8.2	27.1	8
1887	30.2	12.8	12.2	5.2	21.8	8
Average for decade 1878-87.	29.3	15.8	18.4	10.2	28.1	9.5
1888	29.5	17.1	23.8	13.7	33.3	7
1889	25.4	16.2	16.9	10.8	26.4	14
1890	25.1	15.2	16.6	10.1	25.4	7
1891	27.2	18.6	18.3	12.5	25.5	10
1892	25.7	15.5	21.9	13.2	26.0	4
1893	27.3	14.5	23.7	12.6	32.0	5
1894	24.9	15.3	21.5	13.3	30.7	11

The birth-rate for the year is the lowest upon record, and is 1.8 below the mean for the past six years, and 4.4 below that of the previous decade. The general death-rate, though above that of last year, is slightly below the average. The infant mortality is higher than it has been since the year 1888, and the percentage of deaths of children under five years, though below that of last year, has only been exceeded in 1888.

TABLE III.

Table showing number of deaths certified by registered medical practitioners, uncertified deaths, and inquests, with their percentage to total deaths, during the years 1892, 1893, and 1894:—

	Total Deaths.			Percentage of Total Deaths.		
	1892.	1893.	1894.	1892.	1893.	1894.
Certified	204	189	199	93.1	91.7	91.7
Uncertified	9	9	12	4.1	4.3	5.5
Inquests	6	8	6	2.7	3.8	2.7

UNCERTIFIED DEATHS IN 1894.

Locality.	Cause Assigned.	Age.
Westhouse	Natural Causes	64
Bentham	Probably Apoplexy.....	56
Bentham	Probably Apoplexy.....	80
Low Bentham	Premature Birth	3 hours
Low Bentham	Unknown	42
Ingleton ..	Convulsions	1 year 7 months
Burton-in-Lonsdale	Senile Decay	81
Low Bentham	Heart Disease	35
Langcliffe.....	Epileptic Fits	9
Horton	Convulsions	2
Wigglesworth	Failure of Heart's Action	68
Longpreston	Dropsy	71

The number of uncertified deaths is larger than in any year since 1875.

TABLE IV.

Table showing the mortality from certain classes of diseases, and proportions to population and to 1,000 deaths, for 1892, 1893, and 1894:—

	Total Deaths.			Deaths per 1,000 of population.			Proportion of deaths to 1,000 deaths.		
	1892	1893	1894	1892	1893	1894	1892	1893	1894
1. Seven Principal Zymotic Diseases.....	9	12	12	0·6	0·8	0·8	41·0	58·2	55·2
2. Pulmonary Diseases (other than Phthisis)	43	42	38	3·0	2·9	2·6	196	203	175
3. Tubercular Diseases	19	13	22	1·3	0·9	1·5	86·7	63·1	101
4. Wasting Diseases of Infants	16	20	15	1·1	1·4	1·0	73·0	97·0	69·1
5. Convulsive Diseases of Infants	13	7	16	0·9	0·4	1·1	59·3	33·9	73·7

NOTES.

1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, Diarrhoea, and Dysentery.
3. Includes Phthisis, Scrofula, Rickets, and Tabes.
4. Includes Marasmus, Atrophy, Debility, Want of Breast-milk, and Premature Birth.
5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

Among the above classes of disease there is a reduction in the deaths from Pulmonary diseases (other than Phthisis), while those due to Tubercular diseases, which have shown a gradual reduction during the previous five years, have increased in number this year. There is also a marked increase in the deaths due to Convulsive diseases of infants.

TABLE V.

Table showing the number of deaths from the seven principal Zymotic diseases in the years 1892, 1893, and 1894, together with the averages for the period of ten years 1868-77, and 1878-87, and their proportion to 1000 deaths.

Diseases.	Annual Averages of 10 years 1868-1877.	Proportion of deaths to 1000 deaths in 10 years 1868-1877.	Annual Average of 10 years 1878-1887.	Proportion of deaths to 1000 deaths in 10 years 1878-1887.	1892.	Proportion of deaths to 1000 deaths in 1892.	1893.	Proportion of deaths to 1000 deaths in 1893.	1894.	Proportion of deaths to 1000 deaths in 1894.
Smallpox	4.4	14.8	0.1	0.4	...	...	...	...	2	9.2
Measles	3.5	11.8	2.4	7.2	1	4.5	...	...	2	9.2
Scarlet Fever	10.2	34.4	2.1	8.7	1	4.5	3	14.5	2	9.2
Diphtheria	0.8	2.8	0.8	3.3	Croup. 1	4.5	3 Croup 5	24.2	1 Croup 4	18.4
Whooping Cough..	3.9	12.8	2.3	9.6	5	22.8	1	4.8	2	9.2
Fever	9.5	32.0	4.0	16.8	1	4.5	...	...	...	...
Diarrhœa	4.2	14.1	2.1	8.9	...	...	3	14.5	...	...
Totals.....	36.5	122.8	13.8	57.4	9	41.0	12	58.2	12	55.2

Twelve deaths were returned under the head of Zymotic diseases, as compared with 12 last year, and 9 in 1892. This is equivalent to a zymotic rate of 0.8 per 1000 living.

During the year 95 certificates were received under the "Infectious Diseases (Notification) Act, 1889," as compared with 132 last year and 59 in 1892. Of the total 95 cases, 77 were those of Scarletina.

Smallpox.—Nine cases of Smallpox were notified, and removed to the Giggleswick Hospital, and two of these terminated fatally. The first case was reported from Newby, on July 13th. It was that of a man—C. H., aged 42, a labourer. I found that he had been employed as haymaker at Eshton House, near Gargrave, in the Skipton Rural Sanitary District, since July 1st. He was taken ill on Sunday, the 8th, but no doctor saw him. The eruption appeared on the night of the 10th, and on the afternoon of the 11th he travelled by the Midland Railway from Gargrave to Clapham. The station-master seeing that the man was ill put him into a compartment by himself, but the nature of his illness not being known, the carriage was not taken off at Clapham. Arriving at Clapham he called at an Inn, and then managed to walk home to Newby. The man lived with his mother, aged 76, who had had smallpox, and a niece, aged 13. We had her re-vaccinated, and after the removal of the case to the Giggleswick Hospital, the premises were disinfected and the bedding destroyed. The same was done at the Eshton House Farm, where the man had slept, and here re-vaccination of the other inmates was recommended. There was no clue to the origin of this case, but it was evident that the disease was contracted in the neighbourhood of Newby, before he left home. He had no marks of vaccination visible, the disease was confluent in type, and he died on July 21st. On Monday, July 16th, I received intimation of another case at Graystongill Farm, an isolated house between Clapham and High Bentham. The case was that of a boy of 6, who had been vaccinated in infancy (two

marks only being visible), and the disease was much modified in type. The entertainment of a tramp at this house fourteen days previous to the date of attack was the probable source of infection. This case was removed the same day to the Hospital, and the usual precautions taken. The next case was that of the niece of the Newby man already mentioned. She had evidently contracted the disease before her re-vaccination. The disease was very modified in character. Her case was reported and she was moved to the Hospital on the 26th. Unfortunately the next victim was our Inspector of Nuisances for this District. He assisted in moving the first case from Newby, and must then have contracted the disease. He had good marks of primary vaccination, and was re-vaccinated the day before he moved the case, but the operation was unsuccessful. The disease in his case was modified. He was removed to Hospital, and arrangements were made for the revaccination of the other inmates of this house, which was in the middle of Settle, and for the thorough disinfection of the premises. The next occurred in a haymaker (R.T.), aged 31, working at Nut Gill Farm, Ingleton. His case was reported on August 1st, but I found that the actual date of attack was July 27th. The man was staying at High Bentham at the time when he must have contracted the disease, but there was no clue to its origin. He was moved to Hospital on August 2nd, and the usual precautions taken. The man had been vaccinated in infancy only, and had one good mark visible. The attack was modified in type. On August 4th, a case of smallpox was reported in the Giggleswick Workhouse Infirmary, that of a woman (E.G.), aged 32, who had been seven weeks in the institution, where she had gone to be confined. She was immediately moved to the Hospital. As to the origin of the case, having regard to the relation of the Isolation Hospital to the Workhouse premises, I am unable to satisfy myself that direct communication may not have occurred, although from most careful inquiry from the Hospital staff, I am unable to obtain any proof of this. Additional means were taken in order to secure complete severance of the two institutions, and no further cases occurred on the Workhouse premises.

Up to this point all the cases appeared to be dependent upon the same source of infection, although the actual origin of the first cases was not traceable.

The subsequent cases seemed to be a fresh outbreak. The first of these was reported on August 31st, that of a young man (J.G.), aged 26, living in Settle. The next day, that of a woman (E.H.), aged 32, living in Tens-street, Giggleswick, was notified. On inquiry into the history of these, I found that the actual attack in both cases began on August 26th—the 22nd day after the last case was moved into the Hospital. This beginning on the same day suggested a common origin, but I could discover no clue in either case to the source of infection. Both cases were removed to the Hospital, and the usual precautions taken. Both were modified cases in persons vaccinated in infancy only. The last case which occurred was the infant child belonging to the Settle man (J.G.), aged five months, who had not been vaccinated before the disease made its appearance. It was moved to Hospital with its mother on September 10th, and died on September 19th.

All infected clothing and bedding belonging to patients and to the Hospital, which could not be washed and properly disinfected, owing to the absence of a proper steam disinfecter, was destroyed, and compensation paid to the owners by the Sanitary Authority under section 121 of the Public Health Act, 1875, and the cost of this, together with the quarantine expenses incurred by this outbreak, amounted to £45 19s.

Measles.—Two deaths were returned from Measles in young children at Lawkland and Giggleswick, in September and December. This disease is not included in the Notification Act in force, and individual cases are not reported. Measles was prevalent, and the schools had to be closed in consequence, at Edroth in September, Austwick in October, Horton-in-Ribblesdale in November, and Longpreston in December.

Scarlatina.—Two deaths only were registered from scarlet fever, although 77 cases were notified. Of these, 27 were males and 50 were females, 20 were under five and 57 over five years of age. The principal outbreaks during the year occurred at Langeliffe in February and at Burton-in-Lonsdale in December, both being, however, of limited extent, but requiring the schools to be closed. At Langeliffe, in February, the outbreak consisted of 10 cases in seven houses. The spread of the disease was limited owing to the prompt removal of the cases as they occurred to the Giggleswick Hospital, which remained open from February 22nd to June 28th. In one of the first cases I had to apply for a Magistrates' Order for removal under Section 124 of the Public Health Act, 1875, and the parents then gave their consent. The disease was of a mild type. Two cases occurred in one house at Langeliffe Shed in October, but as the hospital was then occupied by smallpox they had to be isolated at home. Care was taken, and there was no spread.

The outbreak at Burton-in-Lonsdale occurred in December, and consisted of 29 cases in eleven houses. Upon inquiry I found that there had been a prevalence of sore throats in the neighbourhood previous to the first cases of scarlatina reported on December 2nd. The disease was of a very mild type, and the infection was evidently being spread through the medium of the schools, which I recommended should be closed. One death occurred, that of a child aged 1 year and 8 months.

Two isolated cases occurred at *Burton* in March and one in April.

Isolated cases occurred at *High Bentham* as follows :—1 in January, 2 in February, 1 in March, 3 in April, 2 in May (one of them imported from Lancaster), 2 in June, and 3 in one house in November.

At *Low Bentham* one case was reported in February, and three in one house in June (probably imported from Lancaster).

At *Sunny Bank, Mewith*, an isolated house, 3 cases occurred in March.

At *Airton*, 2 cases occurred in one house, in February, the infection being apparently imported from Leeds, and 1 case in March.

At *Scosthrop* a single case was reported in February.

A single case occurred in *Settle* in September. Here the infection was distinctly imported from Colne.

Four cases occurred in an isolated house on *Malham Moor* in November, and here the disease was apparently imported from Skipton.

Two cases occurred at *Ingleton* in December, the infection being conveyed from Burton-in-Lonsdale.

In all cases precautions were given and disinfectants supplied; the premises being disinfected after the recovery of the patient.

Diphtheria.—Four cases of diphtheria were reported, and three of them terminated fatally. The first case occurred in Upper Settle, in February, in a girl of 6 who recovered. There was no nuisance complained of on the premises, but the slopstone pipe at the house was untrapped, and there was no dis-connecting trap between the house drain and the main sewer. The next case was reported in the Midland cottages, Settle, also in a girl of 6 years, who died. An untrapped opening was found in the drain from the washhouse, from which a bad smell had been complained of, and steps were taken to have this remedied. In the next, the death was the first intimation of the case, a child of 1 year and 7 months old at Giggleswick. Here several insanitary conditions were found, and a notice was served for their abatement. The last case was that of a girl aged 17, living at Elwood

cottages, Langeliffe, who was attacked on May 19th, and died of the after consequences following diphtheria, on June 29th. There was nothing found on the premises to account for this outbreak, and no further spread among the members of the family which was a large one.

Membranous Croup.—A death was returned as due to membranous croup in a child of three years of age at Giggleswick, in March. On examination no insanitary condition was found on the premises.

Whooping Cough.—Two deaths were registered from whooping cough in infants at Clapham and Settle, in August and September.

Typhoid Fever.—Only two cases were notified as typhoid fever during the year. One of these was a case of a doubtful nature at Mewith in a lad of 15. The water supply was obtained from a spring, but conveyed thence in a land drain, and in consequence liable to pollution. This was subsequently piped. The other case was that of a boy, aged 14, at the Giggleswick Grammar School.

Erysipelas.—Two deaths were returned from this cause. One of these occurred at the Workhouse. One other case was notified at Longpreston in May.

Influenza.—Eight deaths were ascribed to Influenza and its complications. They were adults, and mostly occurred during January and February.

TABLE VI.

Table showing the population, births, deaths, birth-rate, death-rate, and percentage of deaths, at certain ages and for certain diseases, in each Sub-District of the Union during 1894.

Sub-District.	Population.	Births.	Deaths.*	Annual Rate per 1000 living.			Percentage of deaths under 1 year to total deaths.	Percentage of deaths under 1 year to registered births.	Percentage of deaths under 5 years to total deaths.	Percentage of deaths of persons aged 60 and upwards to total deaths.	Percentage of deaths to total deaths.			
				Births.	Deaths.*	Deaths from 7 principal Zymotic Diseases.					From Violence.	Phthisis.	Bronchitis, Pneumonia, Pleurisy.	Heart Disease.
Bentham	5467	146	86	26·7	15·7	0·9	22·0	13·0	34·8	37·2	1·1	6·9	19·7	8·1
Settle	5793	147	80	25·3	13·8	1·2	26·2	14·2	36·2	32·5	..	6·2	17·5	12·5
Longpreston	1815	40	29	22·0	15·9	..	10·3	7·5	13·7	58·6	6·8	13·7	17·2	13·7
Kirkby Malham ..	765	12	10	15·6	13·0	..	20·0	16·6	20·0	40·0	..	10·0	20·0	20·0
Arncliffe	320	8	1	25·0	3·1	..	..	..	..	100	..	..	..	100
Settle Union	14160	353	‡217	24·9	15·3	0·8	21·5	13·3	30·7	39·6	1·3	8·2	17·5	11·0

* Deaths in Workhouse not included in Sub-District returns.

‡ This total includes 11 other deaths which occurred in Public Institutions.

In comparing the rates for the different Sub-Districts with those for last year, it will be seen that the general death-rate is higher in the Settle and Longpreston Sub-Districts, though in the latter 58·6 per cent. of the total deaths were those of persons over 60 years of age.

TABLE VII.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c., completed in the year ending December 31st, 1894:—

	Bentham.	Settle.	Longpreston.	Kirkby Malham.	Arncliffe.	TOTAL.
Number of Complaints received.....	9	12	5	..	1	27
Number of Houses, Premises, &c., inspected	257	117	27	7	5	413
House Drains repaired, cleansed, &c.	35	24	5	2	1	67
„ trapped and ventilated	7	9	10	1	1	28
Sinks disconnected	18	11	9	2	1	41
Privies and Water Closets repaired, cleansed, &c. ..	2	2	1	..	..	5
„ supplied with water	4	12	3	..	..	19
Water Closets provided	4	12	3	..	..	19
Pail Closets provided .....	..	1	9	..	..	10
Privies provided	5	..	5	..	..	10
New Houses.....	5	3	9	..	..	17
Water Supply, Houses provided with	8	3	9	..	..	20
Ashpits, new provided	6	3	9	..	..	18
Ashpits repaired, covered, &c.	1	..	1	..	..	2
Number of Ashpits ordered to be emptied	18	19	2	..	..	39
Removal of accumulation of dung, stagnant } water, animal and other refuse	2	4	2	..	..	8
Removal of animals improperly kept.....	9	..	..	..	..	9
Total No. of Summonses, or other Legal Proceedings	..	..	1	..	..	1
Houses disinfected after infectious disease	16	17	1	..	..	34
Schools disinfected „ „	1	..	..	..	..	1
Common Lodging Houses Inspected	2	2	..	..	..	4
Slaughter Houses inspected	6	9	2	1	..	18
River Pollution	1	2	..	..	..	3

THOMAS A. FOXCROFT, Certificated Inspector of Nuisances.

Common Lodging-houses, Slaughter-houses, &c.—There are four *Common Lodging-houses* and eighteen *Slaughter-houses* in the District. These are registered, have been regularly inspected, and are fairly well kept. No instance of *over-crowding* has been reported, nor has, to my knowledge, any *unsound meat* been exposed for sale. There are no *noxious trades* in the District. *Legal proceedings* were instituted in one case only, against William Wray, of Longpreston, for non-compliance with a Board's Order to abate a nuisance on premises occupied by P.C. Grisedale and Robert Foster. An Order was made for the execution of the work within 14 days, together with a penalty of ten shillings and costs.

TABLE OF DEATHS during the year 1894, in the Rural Sanitary District of SETTLE, classified according to Diseases, Ages, and Localities, and showing also the population of such Localities, and the Births therein during the year.

TABLE B.

NAME OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Population at all Ages.		Aged under 5 or over 5.	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.										Number of such Cases removed from their Homes in the several Localities for treatment in Isolation Hospital.																						
	Census 1881.	Census 1891.		Fevers.						Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.						Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.												
				Enteric Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.					Enteric Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.																	
Bentham Sub-District	5458	5437	{ Under 5 5 upwards	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11
Settle " H	5598	5763	{ Under 5 5 upwards	4	40	1	4	9	1	1	1	1	1	1	4	4	6	1	4	1	1	1	1	1	1	4	4	6	1	4	1	1	1	1	1	1
Longpreston "	1620	1798	{ Under 5 5 upwards	1	4	9	1	4	1	1	1	1	1	1	4	4	6	1	4	1	1	1	1	1	1	4	4	6	1	4	1	1	1	1	1	1
Kirkby-Mallham "	762	753	{ Under 5 5 upwards	1	4	9	1	4	1	1	1	1	1	1	4	4	6	1	4	1	1	1	1	1	1	4	4	6	1	4	1	1	1	1	1	1
Armelife "	362	320	{ Under 5 5 upwards	1	4	9	1	4	1	1	1	1	1	1	4	4	6	1	4	1	1	1	1	1	1	4	4	6	1	4	1	1	1	1	1	1
Settle Rural Sanitary District.....	13800	14071	{ Under 5 5 upwards	1	29	57	1	3	2	2	2	2	2	2	8	4	6	1	8	1	1	1	1	1	1	8	4	6	1	8	1	1	1	1	1	1

The matters requiring the attention of the Authority are :—

- 1.—To augment the water supply for Settle and Giggleswick, increase the water storage capacity at Ingleton, and provide a proper water supply for the hamlet of Newby.
- 2.—To improve the drainage of Longpreston and provide proper means of sewage disposal ; and to provide proper means of sewerage for the hamlet of Newby and the village of Stainforth.
- 3.—To consider the adoption of portions of the “Infectious Disease (Prevention) Act, 1890,” and that portion of Part III. of the “Public Health Acts Amendment Act, 1890,” which is applied to Rural Sanitary Districts.
- 4.—The provision of a proper Ambulance for the removal of cases of infectious disease.

FRANCIS E. ATKINSON, L.R.C.P. (London), M.R.C.S.,
Medical Officer of Health.

To the Settle Rural District Council,
March, 1895.

SETTLE

RURAL DISTRICT COUNCIL

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

1894.

Settle Rural Sanitary District.

SPECIAL REPORT

ON THE SANITARY CONDITION OF THE

TOWNSHIP OF STAINFORTH.

I. *Locality*.—This small rural township is in the Registration Sub-district and in the District and Union of Settle. It is situated in Upper Ribblesdale, and is bounded on the N. by the township of Horton-in-Ribblesdale, and a portion of the township of Halton Gill, on the W. by Feizor, on the E. by Malham Moor, and on the S. by Langcliffe and Giggleswick. The River Ribble crosses the township from North to South, dividing it into two unequal portions, Great Stainforth on the E., and Little Stainforth on the W. bank. The Settle and Carlisle Branch of the Midland Railway crosses it parallel to the river. The population is mostly centred in the village of Stainforth, and the hamlet of Little Stainforth, and there are a few out-lying farm-houses.

II. *Elevation*.—Stainforth is situated on the Carboniferous Limestone, and consists chiefly of grazing land, and some moorland in the N.E., where in Overdale it reaches an elevation of 1500 feet above the ordnance datum. The lowest point is found at the southern extremity of the township where it is 584 feet.

III. *Area*.—The total area of the Township is 3695A. 2R. 18P., that of Great Stainforth being 2705A. 3R. 27P., and of Little Stainforth, 989A. 2R. 31P.

For the following data I have to thank the Clerk :—

Total Rateable Value of Township (1894) £3395.

Total number of Dwelling Houses rated—48.

I have not been able to obtain the rateable value of house-property separate from land.

IV. *Population*.—At the Census of 1881, the Population of the Township was 207, and that of 1891 was 203 (109 males and 94 females). The present population, as the result of the survey, is found to be 207, living in 46 houses, or an average of 4·5 per house. There was only one empty house.

V. *Industries*.—There is no mill or factory in Stainforth, and the inhabitants are for the most part employed in stock-farming.

VI. *Streets and Buildings*.—The village of Stainforth stands on rising ground at a distance of 366 yards from the East bank of the Ribble. The houses are irregularly built on both sides of the Stainforth Beck, a tributary of the Ribble, which runs from E. to W., and enters the river a little below the village. The houses are of stone and are for the most part well-built, some of them are of considerable age. There are several substantially built gentlemen's residences. The hamlet of Little Stainforth contains only three inhabited houses, and is situated on sloping ground across the valley on the West side of and some distance from the river.

The following table gives the number of houses in the township with their living-rooms, bedrooms, and number of inmates:—

Living Rooms	Bed Rooms	Inmates	No. of Houses	Living Rooms	Bed Rooms	Inmates	No. of Houses	Living Rooms	Bed Rooms	Inmates	No. of Houses	
1	1	2	1	2	2	2	2	3	5	5	1	
1	1	3	1	2	4	4	1	3	5	6	1	
1	2	1	3	2	4	5	2	3	6	10	1	
1	2	2	4	2	4	7	1	3	9	2	1	
1	2	3	3	2	5	3	1	4	4	10	1	
1	2	5	2	2	5	5	1	4	4	11	1	
1	3	2	1	3	3	2	1	4	5	3	2	
1	3	8	1	3	4	2	1	4	5	6	1	
1	3	9	1	3	4	4	1	4	6	4	1	
1	4	4	1	3	4	5	1	4	6	11	1	
1	4	5	1	3	4	7	1	4	12	7	1	
1	4	9	1	3	5	3	1					46
Summer Residence											1	
Empty.....											1	
											48	

It will be seen that the house accommodation is satisfactory, and above the average. There are no back-to-back houses, and no instance of *over-crowding* was met with. In seven instances the houses had no back doors, but other means of through-ventilation were provided. The windows are mostly sash-windows and in a few instances these were only made to open at the bottom. Among the older houses some have fixed casements with only single panes to open. This is chiefly the case in houses belonging to Foster's Trust. In two of these houses also, on the Green, the bed-room is not underdrawn.

At Sannat Hall, one of the out-lying farm-houses, the roof is unsound, rain coming into the bedrooms in wet weather.

In three instances *damp* was complained of, in one case the house being earthed up at the back to a considerable height above the floor level.

VII. *Sewerage and Drainage*.—There is no proper system of main sewerage in Stainforth. The house drains for the most part are connected with the stone highway drains, which discharge into the Stainforth Beck. In six instances the house drains empty direct into the beck. In Dr. Whitelegge's report to the County Council in September 1890, on the condition of the River Ribble, he gave the results of analyses of samples of the river water taken at various points between its source and the County boundary. One sample was taken just below where the Stainforth Beck joins the river, and this was shown to indicate greater pollution than was found above this point. In two cases only is all the household sewage conveyed into a tank, namely, in the houses occupied by Mr. James Foster and Mr. Wm. Foster. In the first mentioned however, the drain from the W.C. passes under a portion of the house, and there is no intercepting trap between the house and the cesspool. In the house occupied by Mr. George Perfect, only a portion of the sewage is conveyed into a tank, the W.C. and bath waste discharging into the highway drain. Sherwood House and cottage and Sannat Hall are the only houses where the household sewage is irrigated on to land. Most of the private house

drains are of rubble, the results of the survey showing that in nine instances only are they entirely laid in pipes, and in five others consist partly of stone and partly of pipe drains. At Little Stainforth the house-drainage passes into the drains by the roadside, which eventually discharge into the river.

The following table shows the method of disconnection of slopstone pipes as found in the survey :—

Slopstone pipes disconnected over trapped gulleys	14
Slopstone pipes connected directly with drain and untrapped	18
Slopstone pipes connected with bell-trap	9
Slopstone pipes connected S. trap	1
Slopstone pipes improperly disconnected	3
No slopstone, but untrapped grating outside	2
	<hr/>
	47

It will be noticed that in only fourteen instances is the slopstone pipe properly disconnected from the drain over a trapped gulley, but in very few of these cases is the slopstone pipe itself properly trapped, whereas in eighteen cases the pipes are directly connected with the drain without any trap or air break intervening. In five instances complaint was made of smells from the drains in consequence. In two houses owned by Mrs. Stackhouse and occupied by John Kitchener and Thomas Swinbank, respectively, the slopstone pipes discharged on to gulleys under the slopstone and inside the scullery, and from these the pipe drain was carried under the floors of both houses to the front. This drain was unventilated and one portion was evidently stopped up, and the smell of sewer gas was very strong in both houses at the time of my visit. There was no apparent reason why the drain should have been brought under the houses. At Sannat Hall, and at two houses in Stainforth occupied by Annie Payne and William Parker, the slopwater was found to be percolating into the foundations. In three instances only is the slopstone drainage taken into tanks.

VIII.—*Means of Excrement and Refuse disposal.*—This is chiefly effected by means of block privies and privy-middens. There are however a number of water-closets in Stainforth, and a few privies furnished with moveable receptacles.

The following table shows the method adopted in each case as found in the survey :—

Uncovered Privy-middens	12
Covered Privy-middens	5
Block Privies... ..	16
Pail-privies	5
W.C.s	12
	<hr/>
	50

The water closets are mostly situated inside the houses. Two houses have more than one W.C. Those provided with W.C.s have also privy-middens or block-privy outside. Of the 12 water-closets in Stainforth, only ^{three} ~~two~~ discharge into tanks, the remainder passing into the highway drains, or by private drains direct into the beck. At the house occupied by Mr. James Foster, and at Taitlands, owned and occupied by Mrs. Stackhouse, the soil-pipe is imperfectly ventilated only by a small pipe passing up through the roof, and in the latter the W.C. is of the old pan-closet type. In other cases the soil-pipe is ventilated by a full-diameter pipe carried up above the eaves.

The subjoined table gives the nature of the ashpit accommodation:—

Uncovered Ashpits combined with Privies	...	...	...	20
Covered Ashpits combined with Privies	...	...	...	8
Ashes thrown on to Manure Stead	...	...	...	10
No Ashpit provided	...	...	...	8
				<hr/> 46

It will be seen from the above table that the ashpit accommodation is not satisfactory, moreover in cases where no ashpit is provided people are in the habit of depositing their refuse in the beck. This has also been done in cases where there are ashpits, as difficulty has been experienced in getting their contents removed. An application was recently made to the Sanitary Authority to provide a public tip for the deposit of refuse, but the Authority does not at present possess Urban Powers under Sec. 45 of the Public Health Act 1875, for this township.

IX. *Water Supply*.—Water is piped from a spring by the side of the stream in Sannat Bottom to a central place in the village, whence most of the inhabitants fetch their supply. This appears to be good and plentiful and has never been known to fail. The public are only allowed the use of this supply on sufferance as it might be stopped at any time by the owner of the spring. Nineteen houses have water piped into them from springs situated in the same valley, the highest of these being known as Billinger Spring. There are two private wells, one at the vicarage and one at Mr. William Foster's. The latter is a deep well situated in the road and some time since this water was found to be polluted by the drainage from Mr. Foster's own house. The well was emptied, cleansed, repointed, and the defects remedied at the time. A highway drain however, which receives the sewage from several houses above passes within about eighteen feet of this well. At Little Stainforth, water for domestic purposes is obtained from a dipping well situated at some depth below the surface and led down to by a flight of six steps. The exact site of the spring supplying it is unknown, but the well is liable at times to pollution from the surface, especially in wet weather when the water is rendered turbid and unfit for use. At Sherwood House water is piped into the house from a spring, but at the cottage close by, water is obtained from a dipping well used also for cattle and liable to surface pollution. The former supply should be extended to the cottage.

The following table shows the number of houses using the various sources of supply:—

Fountain	...	...	...	...	...	...	...	22
Water piped into houses from springs	...	...	...	...	...	...	...	14
Water piped into houses from Billinger Spring	...	...	...	...	...	...	...	5
Private Wells	...	...	...	...	...	...	...	2
Dipping Well	...	...	...	...	...	...	...	4
								<hr/> 47

X. *Vital Statistics*.—Owing to the smallness of population, no information of any practical value is to be obtained under this head. During the last 16 years the average annual number of deaths has been 3·3. This is equivalent to an average annual death-rate of 16·0 per 1000. The highest rate reached in any single year was 39·0 in 1891, and the lowest was 4·8 in the years 1885 and 1892. The average annual number of births is 6·4, equivalent to an average annual birth-rate of 31·2 per 1000 of population.

The mortality from zymotic disease during this period has been insignificant, and no out-break of any importance has occurred within the area.

In conclusion, I have to place before the Authority a detailed survey of every house in the township, which has been very carefully carried out by Mr. T. A. Foxcroft, the Inspector of Nuisances.

RECOMMENDATIONS.

I.—As the provision of the district with sufficient sewers for its effectual drainage is a duty imposed upon the Sanitary Authority by the 15th Section of the Public Health Act of 1875, and as by the Rivers' Pollution Prevention Act of 1876, no sewage is allowed to run into any stream without the best possible means being used for its purification, the Authority should adopt the best means for providing Stainforth with proper sewerage and drainage. This provision should include the thorough ventilation of public and private drains, the thorough disconnection of house drains from sewers, and the proper disposal of the sewage at the outfall.

II.—To consider the desirability of adopting some means for the proper and effectual disposal of the ashpit refuse.

III.—To take steps for the improvement and protection of the water supply to the hamlet of Little Stainforth.

FRANCIS E. ATKINSON, L.R.C.P., Lond., M.R.C.S.,
Medical Officer of Health.

To the Settle Rural Sanitary Authority,
October, 1894.

S E T T L E

Rural Sanitary District.

SPECIAL REPORT

ON THE

Sanitary Condition

OF THE

TOWNSHIP of STAINFORTH

BY THE

Medical Officer of Health.

1894.

SKIPTON

RURAL DISTRICT COUNCIL.

Annual Report of the Medical Officer of Health
for the Year 1894.

Area, 147,886 acres; *Rateable Value* (1894), £152,941; *Inhabited Houses* (1871), 5,115; (1881), *estimated* 5,483; (1891), 4,621; *Population enumerated* (1871), 23,606; (1881), 24,674; (1891), 20,575; *Estimated* (1894), 20,650.

Inspection of District.—All parts of this District have been regularly inspected by myself and the Inspector of Nuisances, some portions, of course, having required and received more attention than others. Special visits of inspection have also been made in connection with outbreaks of infectious disease. The year has been one of steady progress, and much good work has been done, not only in the general abatement of nuisances, as will be seen on reference to Table VII., but in the forwarding and carrying out of improvements in water supply, works of sewerage, and the removal of household refuse.

Sanitary Condition and Progress: Water Supply.—The only place in the District where public waterworks have been carried out by the Sanitary Authority is Gargrave. This was done in 1883. The supply is apt to become deficient in a dry season, owing to want of adequate storage, which was not carried out as originally intended. At various times the following places have been supplied with water by private companies:—Crosshills and Glusburn, Farnhill, Bradley, Embsay, Carleton, Cowling, Kelbrook, Salterforth, Grassington, and Cononley. Addingham is supplied through a private company from the Bradford Corporation Works, Burnsall by the Bradford Corporation. Hebden Waterworks are under the control of the Sanitary Authority. The following places are supplied by the principal owners of property:—Thornton, Earby, East and West Marton, Bell Busk, Rylstone, Hetton, Hazlewood, Beamsley and Bolton Abbey, Draughton, Stirton-cum-Thorlby, Thorpe, Linton, Cracoe, and Threshfield. In Lothersdale, water is piped to troughs in the village. Last year the Sanitary Authority called upon the owners of property at Buckden to provide an efficient supply, but no action was taken. In consequence the Sanitary Authority decided to carry out a small scheme. This has been prepared and approved by the Authority, and terms are now being negotiated with the owner of the spring, with a view to enclosing it and piping the water into the houses. At Kettlewell the Sanitary Authority has this year prepared a scheme for providing the village of Kettlewell with water from a spring in Langcliffe Pasture. The property owners have signified their intention of carrying out the scheme by a Private Water Company, and intend doing the work early in the coming year.

Nothing further has been done with regard to the provision of a proper water supply at Appletreewick and Halton East. In the former case, notice was served by the Sanitary Authority on the property owners as long since as 1888, but they have hitherto been unable to come to terms with the Lord of the Manor to pipe water from a spring above the village. The same difficulty has been experienced at Halton East. The Sanitary Authority should, in each case, undertake the supply without further delay.

In other parts of the District, water is obtained from springs, wells, and streams, and in some instances is piped into the houses.

Sewerage and Drainage.—Previous to 1893 no complete scheme of sewerage had been carried out by this Authority, but portions of schemes were provided at Carleton, Embsay, and Bradley. In 1893 a complete scheme was carried out for the proper sewerage of Glusburn, Crosshills, and Junction, and a description of this appeared in last year's report. Plans were also prepared for the sewerage of Gargrave and sanction obtained for the loan required. Plans were prepared for the sewerage of Addingham, and of Thornton, Earby, and Kelbrook, and submitted to the Local Government Board. The last section of the Carleton sewerage was also laid, and this scheme is complete except the sewage disposal works.

During 1894 the works of sewerage and sewage disposal for Gargrave have been carried out, and of these the following is a brief description:—

Four acres of land have been taken on a lease from Sir M. Wilson, and a portion has been laid out in plots for intermittent downward filtration—the rest is kept in grass with carriers for distributing the sewage as desired. The land is admirably adapted for sewage treatment, the effluent being very good indeed. A main sewer has been constructed from the works through the village to the Canal on the South, and the Railway Station on the North, consisting of 2,265 yards of 12-inch pipe sewer, 2,414 yards of 9-inch, and 555 yards of 6-inch pipe sewer. The river is crossed twice, once by a straight cast iron sewer, 45 yards 12-inch diam., the other by a syphon 25 yards 9-inch diam. The sewers are laid out in straight lengths with even gradients, and there are on the sewers 45 man-holes and 41 lamp-holes and 5 flushing-chambers. Through the fields the man-hole covers are open gratings to ventilate the sewers, but in the village closed man-hole covers are used and the sewer is ventilated by a number of 6-inch and 4-inch cast iron shafts taken up the sides of the buildings. The private drainage connections are nearly all completed, and the change wrought in this village during the year has been most remarkable, as will be seen elsewhere in this report; a quantity of old cesspools have been abolished and some form of w.c. adopted, and whenever possible the slop-water closet has been used.

At Addingham, at the close of last year a Provisional Order was applied for for the compulsory purchase of land for dealing with the sewage of Addingham, the sanction to the proposed loan being deferred until the land was acquired. Early in the year the owner consented to sell the land without the intervention of the Order, and the sanction of the Local Government Board was given to proceed with the work. Owing to difficulties with the tenant as to compensation, the Sanitary Authority decided not to enter the land until his notice expired in February, 1895. The greater portion, however, of the contract was let in March this year to Godfrey Pearson, of Cleckheaton, for £1,565 for No. 1 contract, and to Messrs. H. Lee, of Gomersal, for iron contract, for £90 12s. 10d. The work was commenced in May, and is practically completed. The No. 1 contract consists of 224 yards of 18-inch pipe-sewer, 335 yards of 15-inch pipe-sewer, 1,571 yards of 12-inch

pipe-sewer, 926 yards of 9-inch pipe-sewer; 28 yards of 18-inch, 31 yards of 12-inch, and 6 yards of 9-inch cast iron sewer are used in crossing the beck at different points. The sewers are laid out in straight lines and even gradients, and there are 21 manholes and 19 ventilators. A large flushing tank is built up at the head of the sewers, supplied from the spring in Duck-street. The remainder of the work will be taken in hand immediately the tenant's notice has expired (February, 1895).

At Earby, a Local Government Board Inquiry was held on January 18th, 1894, under Major-General Crozier, R.E., into a proposed scheme for the joint sewerage of the three villages, prepared by Mr. A. E. Preston, C.E., of Bradford, asking for sanction for a loan of £7,500. The Local Government Board suggested a few modifications in the scheme, and when these were complied with sanction was obtained, and the contracts were let to Mr. Riley Hopkinson, of Halifax, for £4,575 main contract, and to Messrs. Blakeborough & Sons, of Brighouse, for iron work, for £301. The work was started early in June, and is still in progress. At the end of 1894, a considerable portion of the sewers at Earby had been constructed and sub-soil drains laid on the land acquired for Sewage Disposal, amounting to about one-third of the total of the contract. The sewers are constructed of glazed earthenware pipes, varying in size from 15 to 9 inches, laid out in straight lines with even gradients, and with man-holes and lamp-holes at all bends and changes of gradient; the whole of the work will thus be open to inspection. Sluices are being fitted, by which the different lengths may be flushed. The sewage will be purified by intermittent downward filtration on the land acquired by the Board.

At Kildwick, a scheme prepared for Major Wilson for dealing with the sewerage of a portion of this village was approved by the Sanitary Authority, and work has been completed during the year.

During the present year a portion of the village of Threshfield has been properly sewered by the owner, Sir Mathew W. Wilson, and the sewage conveyed into a tank with effluent on to land.

A scheme for the proper sewerage of Grassington has been prepared this year for the Sanitary Authority. Negotiations are now being made for the provisional purchase of land for sewage disposal purposes, and when completed the plans will be submitted to the Local Government Board.

Steps should be taken to provide proper means of sewerage for Salterforth, Cowling, Cononley, and Farnhill.

The private drainage of old property throughout the District (except where it has been altered) consists of rubble, but all houses erected during recent years have their drains properly laid in sanitary pipes. Constant improvements are being made in the private drainage of houses in all parts the result of routine inspection, as will be seen in Table VII at the end of this report.

For further details as to the sanitary condition of the various villages and hamlets, I must refer you to my report on this District for last year.

Excrement and Refuse Disposal.—The common privy-midden is the form mostly in use in this Rural District. The provision of privies with movable receptacles is on the increase, especially in those places where the scavenging is undertaken. A considerable number of Duckett's slop-water closets have also been provided, and these appear to work satisfactorily at Earby, Embsay, Addingham, and Gargrave. These have also been largely adopted in Crosshills and Glusburn, and Gargrave since the sewers were available. The removal of

night-soil and ashpit-refuse is undertaken by contract under the Sanitary Authority at Addingham, Glusburn, Farnhill, Gargrave, and Cowling. In consequence of the change of system at Gargrave, a fresh contract has been prepared for the removal of ashpit refuse only, and this was let in December for one year to Mr. Robert Preston for £28 per annum, as against £90 for 1893, and £76 for 1894.

These scavenging operations where undertaken by the Sanitary Authority have been well carried out, the work being let by yearly contracts.

The following table shows the number of loads of ashpit-refuse, and of night-soil removed, and the number of pails emptied during 1894, in the places where the scavenging is undertaken by contract:—

Locality.	No. of Loads of Ashpit Refuse	No. of Loads of Night-soil exclusive of Pails.	No. of Pails.	Annual Cost of Scavenging.
Addingham.....	714	166	6193	£68
Cowling	267	99	4895	£58
Gargrave.....	344	174	906	£76
Glusburn	416	37	4888	£60
Farnhill	142	18	2194	£26
Totals	1883	494	19,076	£288

Bye-Laws, &c.—This Authority obtained Urban Power under sections 157 and 158, and under 169 (paragraphs 2 and 3) and 170, Public Health Act, 1875, for Addingham, Bradleys Both, Carleton, Cononley, Cowling, Embsay-cum-Eastby, Farnhill, Gargrave, Glusburn, Grassington, Kildwick, Salterforth, and Thornton; and a code of bye-laws closely assimilated to the Models was framed, and allowed by the Local Government Board on September 25th, 1888. This Authority has also adopted the Model bye-laws with respect to “Common Lodging-Houses.”

In places of considerable size, or where much building is going on, certain other powers are necessary which are not included under the bye-laws, namely, to compel the proper paving, channelling, and flagging, where necessary, of private streets; to regulate the line of buildings; to prevent the bringing forward of any building which forms part of a street, and to name the streets and number the houses. Application should, therefore, be made under sec. 276 for Urban Powers under sections 150, 155, 156, and 160 (sub-section 1), for the contributory places of Addingham, Cononley, Cowling, Carleton, Glusburn, Gargrave, and Thornton. A series of regulations under the “Dairies, Cowsheds, and Milkshops Order, 1886,” has also been adopted. A series of regulations was drawn up by the Sanitary Authority last year with respect to house drains and the mode of connecting the same with the public sewers, and these are adhered to wherever public sewers are being provided.

Acts of Parliament Adopted.—The Infectious Diseases (Notification) Act, 1889, was adopted, and came into force on January 1st, 1890. Part III. of the Public Health Acts (Amendment) Act, 1890, was adopted, and came into force in August, 1893. The Addingham Beck was again cleansed by order of the Sanitary Authority in June last.

"*Housing of the Working Classes Act, 1890.*"—In December, I reported to the Sanitary Authority, under sec. 30 of this Act, upon a house at Grassington, and application was made to the Magistrates for a closing order, which has since been obtained.

Infectious Hospitals.—The Joint Temporary Hospital at Skipton has been used during the year for the isolation of 17 cases of scarlatina. The Temporary Small-pox Hospital at Winterburn has not been required this year, but a caretaker and his wife were appointed in July last to live on the premises, and keep the hospital in readiness for the reception of cases.

The question of the provision of a permanent hospital for the isolation of cases of infectious disease (other than those of small-pox) should be seriously considered. In 1892 an attempt was made to combine with the Skipton Urban Sanitary Authority for the provision of a permanent hospital, but this subsequently unfortunately fell through. Should an opportunity of combining again occur, this Authority would, I think, be wise in considering it, as the provision could be made as efficiently and more economically by combination than otherwise.

Burial Ground at Salterforth.—In November, in consequence of a complaint received as to the insanitary condition of the burial ground at Salterforth belonging to the Inghamite Chapel, I presented a report upon it to the Sanitary Authority. A deputation from the trustees subsequently attended a meeting of the Authority, and consented to restrict future interments to certain portions of the ground, and to lose no time in looking out for a new site.

Births.—The total births registered during the year were 554 in number (239 males and 315 females). This is an increase of 18 upon last year, and is equivalent to an annual birth-rate of 26·8 per 1,000, as compared with 25·9 last year, and 25·3 in 1892. The natural increase to the population is 261.

Deaths.—The total deaths returned were 293 (147 males and 146 females). To this must be added six deaths of persons belonging to the District who died in the Skipton Workhouse. This total (299) is a decrease of 42 from last year, and is equivalent to a death-rate of 14·4 per 1,000 living, as against 16·5 last year, and 16·8 in 1892.

Ages at Death.—Among children under one year of age there were 51 deaths. This gives an infant mortality of 9·0 per cent. of registered births, and is equivalent to 16·7 per cent. of the total deaths. Among children under five there were 81 deaths, or a percentage to total deaths of 26·7. Among persons aged 60 years and upwards there were 115 deaths, or a percentage to total deaths of 40·4.

The Skipton Union is divided into seven Sub-Districts, viz.:—Kettlewell, Gargrave, Barnoldswick, Kildwick, Skipton, Addingham, and Grassington.

A. Kettlewell Sub-District.—Area, 29,516 acres; population at census (1871), 1,017; (1881), 854; (1891), 672 (340 males and 332 females); inhabited houses, 165; persons per house, 4·0; empty houses, 39; is situated in the upper portion of the Wharfe drainage area, and comprises the townships of Buckden, Kettlewell Parish, and Conistone-with Kilnsey.

Year.	Births registered.	Birth-rate.	Deaths of Children under 1 year of age.	Deaths of Children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.
1884	19	22.2	...	...	10	11.6	3	...	...	...	...	...	...	...
1885	19	21.9	2	10.5	9	10.3	4	...	...	...	...	...	...	...
1886	15	17.1	1	6.6	18	20.5	12	...	...	...	...	...	...	...
1887	16	18.0	2	12.5	16	18.0	11	...	...	...	...	...	...	...
Average for Decade 1878-87.	19	21.6	1.8	10.2	13	14.4	6.4	...	...	...	...	0.1	0.4	0.2
1888	15	16.7	1	6.6	5	5.5	1	...	...	...	...	...	...	...
1889	10	10.9	1	10.0	14	15.3	10	...	...	...	...	...	1	...
1890	14	15.7	2	14.2	13	14.1	7	...	...	...	...	...	...	...
1891	11	16.3	...	...	12	17.8	10	...	...	...	...	...	...	...
1892	16	23.8	1	6.2	14	20.8	10	...	...	...	...	...	...	...
1893	11	16.3	2	18.1	16	23.8	9	...	...	...	...	...	1	...
1894	16	23.8	2	12.5	5	7.4	3	...	...	...	...	...	...	...

The birth-rate has only been as high in 1892, and is 2.2 above the average for the decade 1878-87. The death-rate is, with the exception of that for 1888, the lowest upon record.

B. Gargrave Sub-District.—Area, 16,872 acres; population at census (1871). 2,030; (1881), 2,117; (1891), 2,238 (1,044 males and 1,194 females); inhabited houses, 451; persons per house, 4.9; empty houses, 14; is situated in the Aire drainage area, and comprises the townships of Hetton, Boardley, Calton, Flasby-cum-Winterburn, Eshton, Coniston Cold, Gargrave, and Banknewton.

Year.	Births registered.	Birth-rate.	Deaths of Children under 1 year of age.	Deaths of Children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.
1884	55	25.4	8	14.5	35	16.2	10	...	..	...	...	...	...	...
1885	73	32.6	7	9.5	35	16.1	12	...	..	...	...	1	1	...
1886	71	32.6	10	14.0	40	18.3	11	...	1	...	...	...	...	1
1887	68	31.0	4	5.8	36	16.4	10	...	..	1	...	...	...	1
Average for Decade 1878-87.	64	30.4	6.4	10.0	35	16.9	11.7	...	0.1	0.2	...	0.4	0.4	0.3
1888	81	36.8	11	13.5	44	20.0	15	1	...	...	...	...	1	1
1889	59	26.6	4	6.7	33	14.9	11	...	1	...	1	...	..	...
1890	56	25.2	5	8.9	24	10.8	9	...	1	...	1	...	...	...
1891	49	21.8	6	12.2	42	18.7	15	...	...	5	...	...	...	...
1892	57	25.4	5	8.7	35	15.6	13	...	...	1	...	...	1	...
1893	48	21.4	3	6.2	26	11.5	9	...	...	...	...	...	...	...
1894	45	20.0	7	15.5	28	12.4	13	..	...	...	...	...	...	...

The birth-rate here is the lowest on record, and the death-rate has only been lower in the years 1893 and 1890. The infant mortality rate, however, is the highest on record.

C. Barnoldswick Sub-District.—Area, 13,752 acres; population at census (1871) 6,224, (1881) 7,290, (1891) 3,847 (1,899 males, 1,948 females); inhabited houses, 808; persons per house, 4·7; empty houses, 56. This sub-district is situated partly in the Aire and partly in the Ribble drainage area, and comprises the townships of Martons Both, Salterforth, and Thornton-in-Craven in the former, and Bracewell, Brogden-cum-Admergill, and Coates in the latter.

Year.	Births registered.	Birth-rate.	Deaths of children under 1 year of age.	Deaths of children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Smallpox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Cholera.
1884	252	33·8	39	15·4	153	20·5	38	...	2	...	6	...	1	3	1
1885	260	34·9	32	12·3	136	18·2	37	...	1	...	...	...	1	4	1
1886	253	33·8	23	9·0	124	16·5	30	...	3	4	...	1	12	4	...
1887	242	32·3	37	15·2	151	20·1	41	...	1	7	...	4	3	2	...
Average for Decade 1878-87.	245	34·8	34	13·5	141	20·2	35	...	1·7	5·5	0·8	1·7	3·9	3·9	0·6
1888	239	31·6	32	13·3	113	14·9	29	...	4	5	1	..	...	1	1
1889	232	30·5	28	6·8	118	15·5	35	...	...	...	M. Crp. 1	1	3	1	...
1890	193	25·2	27	13·9	130	17·0	46	...	...	...	2	1	1	5	...
1891	112	29·1	19	16·9	67	17·4	26	...	2	...	...	...	...	...	...
1892	124	32·2	7	5·6	57	14·8	28	...	1	...	...	2	...	...	...
1893	118	30·6	16	13·5	60	15·5	19	...	...	...	...	...	...	1	...
1894	134	34·7	10	7·4	65	16·8	22	...	1	...	M. Crp. 1	...	...	2	...

The birth-rate is higher here than it has been since 1885. The general death-rate, though higher than in the last two years, is below the average, and the infant mortality is satisfactorily low.

D. Kildwick Sub-District.—Area, 9,442 acres; population at census (1871) 5,648, (1881) 5,593, (1891) 5,993 (2,822 males, 3,171 females); inhabited houses, 1,449; persons per house, 4·1; empty houses, 131. This sub-district is entirely in the Aire drainage area, and is the most populous in the Rural Sanitary District. It comprises the townships of Cononley, Cowling, Glusburn, Kildwick, Farnhill, and Bradleys Both.

Year.	Births registered.	Birth-rate.	Deaths of children under 1 year of age.	Deaths of children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Cholera.
1884	150	26·4	19	12·6	120	17·8	36	...	...	...	...	...	2	1	...
1885	147	25·5	13	8·8	100	17·7	32	...	...	...	...	3	1	...	...
1886	160	27·6	21	13·1	109	18·6	41	...	...	...	...	...	...	2	...
1887	157	27·0	17	10·8	122	20·9	44	...	5	7	...	...	...	2	...
Average for Decade 1878-87.	157	27·7	19	12·2	109	19·2	36	0·1	0·9	1·7	0·1	1·2	1·4	2·3	0·1
1888	143	24·4	23	16·0	111	18·9	42	...	5	...	...	...	...	1	...
1889	149	25·2	17	11·4	100	16·9	43	...	1	2	...	...	2	3	...
1890	136	22·9	13	9·7	98	16·5	49	...	...	...	...	2	3	1	...
1891	142	23·6	20	14·0	129	21·5	55	...	9	...	...	...	1	2	...
1892	133	22·1	16	12·0	98	16·3	38	...	...	2	4	2	...	...	...
1893	139	23·1	12	8·6	81	13·4	31	...	...	...	Crp. 2	...	...	2	...
1894	148	24·6	10	6·7	87	14·4	36	...	1	...	...	...	...	2	...

The birth-rate has only once be exceeded during the past six years, but is below the average for the previous decade. The death-rate is, with the exception of last year, the lowest recorded. The infant mortality is the lowest on record.

E. Skipton Sub-District.—Area, 17,773 acres; population at census (1871), 3,426; (1881), 3,681; (1891), 3,225; (1,545 males, 1,680 females); inhabited houses, 700; persons per house, 4·6; empty houses, 131. This sub-district is for the most part situated in the Aire Drainage Area, and surrounds the township and Urban Sanitary District of Skipton except on the south and east. It comprises the townships of Elslack, Broughton, Carleton Parish, Stirton-cum-Thorlby, Embsay-cum-Eastby, Halton East, and Rylstone.

Year.	Births registered.	Birth-rate.	Deaths of children under 1 year of age.	Deaths of children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Smallpox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhea.
1884	92	24·7	7	7·6	47	12·6	18	...	...	...	...	...	1	...
1885	92	24·6	10	10·8	45	12·0	19	...	...	...	...	1	1	...
1886	82	21·1	11	13·4	57	15·2	19	..	...	...	...	...	...	..
1887	99	23·7	13	13·1	54	14·3	19	..	2	2	...	...	...	...
Average for Decade 1878-87.	100	27·3	9·9	9·8	52	14·5	17	...	0·5	1·2	0·1	0·7	0·7	0·4
1888	102	27·1	9	8·8	65	17·2	26	...	2	1	...	...	...	1
1889	103	27·2	15	14·5	68	18·0	24	...	...	...	...	...	2	...
1890	88	23·2	10	11·3	57	15·0	25	...	4	1	...	...	...	1
1891	91	28·2	17	18·6	71	22·0	28	...	2	1	...	2	1	...
1892	82	25·3	9	10·9	51	15·7	17	...	...	...	...	3	1	...
1893	93	28·7	12	12·9	72	22·2	25	...	...	...	1	1	1	...
1894	87	26·8	7	8·0	34	10·4	13	...	...	...	...	1	...	...

The birth-rate is below the average, and the death-rate is this year the lowest upon record. The infant-mortality has not been so low since 1884.

F. Addingham Sub-District.—Area, 14,234 acres; population at census (1871) 2,910, (1881) 3,237, (1891) 3,139 (1,513 males, 1,626 females); inhabited houses, 682; persons per house, 4·6; empty houses, 37. This is a group of townships on the east of the Rural Sanitary District, and situated entirely in the Wharfe drainage area. It comprises the townships of Addingham, Beamsley, Hazlewood-cum-Storiths, Draughton, Bolton Abbey, and Barden.

Year.	Births registered.	Birth-rate.	Deaths of children under 1 year of age.	Deaths of children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Smallpox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.
1884	92	28.0	13	14.1	60	18.2	13	...	1	1	...	...	2	...
1885	100	30.4	11	11.0	66	20.0	23	...	1	...	...	...	1	1
1886	104	31.5	17	16.3	63	19.0	20	...	...	...	...	...	...	2
1887	110	33.2	8	7.2	50	15.1	16	...	1	2	...	1	1	1
Average for Decade 1878-87.	102	32.6	14.7	14.4	65	20.9	19	...	0.9	0.8	0.3	1.3	1.1	2.0
1888	110	33.1	21	19.0	73	21.9	23	...	...	...	...	...	1	1
1889	77	22.9	12	15.5	62	18.4	30	...	1	...	...	2	...	2
1890	92	27.2	17	18.4	67	19.8	29	...	...	...	...	...	...	1
1891	98	31.2	15	15.3	59	18.7	25	...	...	2	...	...	...	2
1892	86	27.3	7	8.1	56	17.8	23	...	...	1	...	6	...	2
1893	95	30.1	9	9.4	46	14.6	18	...	...	1	...	...	...	...
1894	96	30.4	14	14.5	47	15.4	12	...	...	...	Croup 1	...	3	1

The birth-rate is slightly below the average. The death-rate, though higher than last year, is lower than in the previous five years. The three deaths from typhoid fever occurred in Addingham.

G. Grassington Sub-District.—Area, 21,983 acres; population at census (1871), 2351; (1881), 1912; (1891), 1461 (710 males, 751 females); inhabited houses, 366; persons per house, 3.9; empty houses, 151; comprises the group of townships to the north-east of the District, and is situated entirely in the Wharfe drainage area. It contains the townships of Appletreewick, Hartlington, Burnsall, Thorpe, Cracoe, Linton, Threshfield, Grassington, and Hebden.

Year.	Births registered.	Birth-rate.	Deaths of Children under 1 year of age.	Deaths of children under 1 year. Percentage of registered births.	Deaths at all ages.	Death-rate.	Deaths over 60 years of age.	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.
1884	48	25.0	5	10.4	41	21.3	14	...	...	4	...	...	...	...
1885	36	18.6	7	19.4	33	17.1	16	...	...	1	...	...	...	1
1886	38	19.6	2	5.2	19	9.8	7	...	...	...	...	...	...	...
1887	46	23.6	2	4.3	29	14.9	13	...	...	...	...	...	...	...
Average for Decade 1878-87.	53	25.8	6.1	11.1	32	15.3	13	...	0.2	1.0	...	0.1	...	0.3
1888	37	18.8	8	21.6	30	15.3	13	...	...	1	...	3	...	...
1889	44	22.3	2	4.5	23	11.6	16	...	...	...	...	...	...	...
1890	38	19.1	1	2.6	34	17.1	19	...	...	1	1	...	...	2
1891	30	20.2	6	20.0	26	17.7	11	...	2	...	...	...	...	1
1892	25	17.0	3	12.0	28	19.1	16	...	...	...	...	...	...	...
1893	32	21.7	4	12.5	25	17.0	11	...	...	...	...	...	...	...
1894	28	19.0	1	3.5	27	18.3	16	...	...	...	...	...	...	1

The birth-rate is 4·5 below the mean for the past sixteen years, while the death-rate is 2·7 above the mean for the same period, but 59·2 per cent. of the deaths were those of persons over 60 years.

The following Tables are uniform with those of previous years:—

TABLE I.

Table showing population, inhabited houses, births and deaths, for the years 1884-94 inclusive, and the average for the ten years, 1878-87:—

Population estimated at the middle of the year.		No. of Inhabited Houses in the District.	Births.	Deaths. *
		(Estimated).		
1884	25,050	5,540	708	447
1885	25,160	5,540	727	424
1886	25,280	5,590	723	430
1887	25,400	5,610	736	458
Average for decade 1878-87.	24,750	5,415	744	452
1888	25,520	5,640	727	441
1889	25,730	5,650	673	418
1890	25,850	5,680	617	423
1891	20,575	4,621	533	406
1892	20,600	4,670	523	339
1893	20,625	4,720	536	326
1894	20,650	4,740	554	293

* Exclusive of deaths in Skipton Workhouse, as per last column of Table II.

The number of deaths is a considerable reduction upon last year, which was the smallest yearly number recorded.

TABLE II.

Table showing the annual birth-rate, rates of mortality, death-rates among children, and deaths in public institutions, during the eleven years 1884-94 inclusive, and the average for the decade 1878-87:—

Year.	Birth-rate per 1000 of the Population.	Annual Rate of mortality per 1000 living.	Deaths of Children under 1 year; percentage of total deaths.	Percentage of deaths of Children under 1 year to registered births.	Deaths of Children under 5 years; percentage of total deaths.	Total number of deaths in Public Institutions.
1884	28·2	18·1	20·0	12·8	29·0	8
1885	28·8	17·0	19·0	11·2	30·9	6
1886	28·5	17·6	19·0	11·7	29·5	15
1887	28·9	19·4	17·7	11·2	30·7	10
Average for decade 1878-87.	30·0	18·8	19·9	12·3	32·1	11
1888	28·4	17·9	22·9	14·4	30·6	16
1889	26·1	16·4	31·5	11·7	24·3	5
1890	23·8	16·6	17·4	12·1	23·6	8
1891	25·9	20·0	20·1	15·5	28·6	6
1892	25·3	16·8	13·7	9·1	25·0	9
1893	25·9	16·5	17·2	11·0	23·9	15
1894	26·8	14·4	16·7	9·0	26·7	6

The birth-rate is 1·6 below the mean for the previous sixteen years. The death-rate is the lowest ever recorded, and is 3·8 below the mean for the same period. The infant mortality is also the lowest upon record.

TABLE III.

Table showing number of deaths certified by registered medical practitioners, uncertified deaths, and inquests, with their percentage to total deaths, during 1892, 1893, and 1894, in each Registration Sub-District of the Union:—

DISTRICT.	TOTAL DEATHS.									PERCENTAGE TO TOTAL DEATHS.								
	Certified.			Uncertified.			Inquests.			Certified.			Uncertified.			Inquests.		
	1892	1893	1894	1892	1893	1894	1892	1893	1894	1892	1893	1894	1892	1893	1894	1892	1893	1894
Kettlewell ...	14	15	2	...	1	3	...	...	...	100	93.7	40.0	...	6.2	60.0	...	...	...
Gargrave	33	25	25	2	1	1	...	...	2	94.2	96.1	89.2	5.7	3.8	3.5	...	...	7.1
Barnoldswick..	55	57	56	...	2	5	2	1	4	96.4	95.0	86.1	...	3.3	7.6	3.5	1.6	6.1
*Kildwick	90	72	74	6	8	10	2	1	3	91.8	88.8	85.4	6.1	9.8	11.4	2.0	1.2	3.4
†Skipton	47	66	29	4	4	4	...	2	1	92.1	91.6	85.2	7.8	5.5	11.7	..	2.7	2.9
Addingham ...	52	40	46	2	5	1	2	1	...	92.8	86.9	97.8	3.5	10.8	2.1	3.5	2.1	...
Grassington ...	25	23	23	1	1	1	2	1	3	89.2	92.0	85.1	3.5	4.0	3.6	7.1	4.0	11.1
Totals.....	316	298	255	15	22	25	8	6	13	93.2	91.1	87.0	4.4	6.7	7.5	2.3	1.8	4.4

* Exclusive of the Township of Silsden.

† Exclusive of the Township of Skipton.

The uncertified deaths though comparatively few in number have slightly increased during the past three years, and amount to 7.5 per cent. of the total deaths. The largest number is found in the Kildwick Sub-District. The causes assigned for the uncertified deaths were as follows:—Convulsions and Probably Convulsions, 4; Jaundice and Convulsions, 1; Bronchitis and Convulsions, 1; Premature Birth, 1; Probably Chronic Cystitis, 1; Pneumonia and Probably Pneumonia, 2; Congenital Heart Disease, 1; Heart Disease and Supposed Heart Disease, 3; Heart Disease and Bronchitis, 1; Probably Goitre and Cardiac Debility, 1; Diseased Bone and Pyæmic Abscesses, 1; Suppressed Measles, 1; Influenza, 1; Old Age and Senile Decay, 3; and Not Known, 3;

TABLE IV.

Table showing the mortality from certain classes of diseases, and proportions to population and to 1,000 deaths, for 1892, 1893, and 1894:—

	Total Deaths.			Deaths per 1,000 of population.			Proportion of deaths to 1,000 deaths.		
	1892	1893	1894	1892	1893	1894	1892	1893	1894
1. Seven Principal Zymotic Diseases.....	26	10	15	1.2	0.4	0.7	76.6	29.2	51.1
2. Pulmonary Diseases (other than Plithisis)	71	67	62	3.4	3.2	3.0	209	205	211
3. Tubercular Diseases	33	36	28	1.6	1.7	1.3	97.3	110	95.5
4. Wasting Diseases of Infants	13	25	17	0.6	1.2	0.8	38.3	76.6	58.0
5. Convulsive Diseases of Infants	14	23	15	0.6	1.1	0.7	41.2	70.5	51.1

NOTES.

1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, Diarrhœa, and Dysentery.
3. Includes Phthisis, Scrofula, Rickets, and Tabes.
4. Includes Marasmus, Atrophy, Debility, Want of Breast-milk, and Premature Birth.
5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

It will be seen that there is considerable decrease in the number of deaths among all the above classes of disease except that of Zymotic disease, though the proportion to the total deaths has increased in the case of Pulmonary diseases (other than Phthisis).

TABLE V.

Table showing the number of deaths from the seven principal Zymotic diseases in the years 1886 to 1894, and the proportion of deaths to 1000 deaths in 1892, 1893, and 1894.

Diseases.	1886	1887	1888	1889	1890	1891	1892	Proportion of deaths to 1000 deaths in 1892.	1893	Proportion of deaths to 1000 deaths in 1893.	1894	Proportion of deaths to 1000 deaths in 1894.
Smallpox .....	...	...	1	...	...	...	...	...	...	...	...	...
Measles	4	9	11	3	5	15	1	2.9	...	...	2	6.8
Scarlet Fever.....	4	19	7	2	2	8	4	11.2	1	2.9	1*	3.4
Diphtheria .....	...	...	1	1	4	...	4	11.2	² Croup 3	8.7	^{Croup.} 2	6.8
Whooping Cough..	1	5	3	3	3	2	13	38.3	1	2.9	1	3.4
Fever	12	4	3	8	4	2	2	5.8	2	5.8	3	10.2
Diarrhœa	9	6	6	6	10	6	2	5.8	3	8.7	6	20.4
Totals.....	30	43	32	23	28	33	26	76.6	10	29.2	15	51.1

* The death from scarlatina occurred in the Skipton Joint Hospital, and was that of a child from Cononley.

Fifteen deaths were returned during the year under the head of zymotic disease, as compared with 10 last year, and 26 in 1892. This is equivalent to a zymotic rate of 0.7 per 1000 living, as against 0.4 last year, and 1.2 in the two previous years.

TABLE VI.

Table showing the population, births, deaths, birth-rate, death-rate, and percentage of deaths, at certain ages and for certain diseases, in each Sub-District of the Union during 1894.

Sub-District.	Population.	Births.	Deaths.*	Annual Rate per 1000 living.			Percentage of deaths under 1 year to total deaths.	Percentage of deaths under 1 year to registered births.	Percentage of deaths under 5 years to total deaths.	Percentage of deaths of persons aged 60 and upwards to total deaths.	Percentage of deaths to total deaths.			
				Births.	Deaths.*	Deaths from 7 principal Zymotic Diseases.					From Violence.	Phthisis.	Bronchitis, Pneumonia, Pleurisy.	Heart Disease.
Kettlewell	672	16	5	23·8	7·4	..	40·0	12·5	40·0	60·0	..	..	..	20·0
Gargrave	2244	45	28	20·0	12·4	..	25·0	15·5	32·1	46·4	7·1	..	35·7	10·7
Barnoldswick	3858	134	65	34·7	16·8	1·0	15·3	7·4	29·2	33·8	4·6	7·6	12·3	7·6
**Kildwick	6014	148	87	24·6	14·4	0·4	11·4	6·7	18·3	41·3	2·2	10·3	14·9	8·0
†Skipton	3239	87	34	26·8	10·4	0·3	20·5	8·0	35·2	38·2	2·9	5·8	41·1	17·6
Addingham	3154	96	47	30·4	15·4	1·5	29·7	14·5	42·5	25·5	..	8·5	23·4	10·6
Grassington	1469	28	27	19·0	18·3	0·6	3·7	3·5	11·1	59·2	7·4	..	22·2	11·1
Skipton Rural Sanitary District }	20650	554	‡293	26·8	‡14·4	0·7	16·7	9·0	26·7	40·4	3·3	6·6	20·7	10·0

** Excluding Silsden District.

* Death in Workhouse not included.

† Excluding Skipton Township.

‡ Including deaths in Workhouse.

In comparing the Sub-Districts, the highest death-rates are found in Grassington (18·3) and Barnoldswick (16·8), but in the former 59·2 of the deaths were those of persons aged 60 and upwards, and they are in both instances lower than last year. The highest infant-mortality rate is found in Gargrave (15·5), Addingham being next with 14·5. The greatest longevity is found in Kettlewell. Addingham has the highest zymotic rate.

PREVALENCE OF ZYMOTIC DISEASE.

The Infectious Diseases (Notification) Act, 1889, was adopted by this Authority, and came into force on January 1st, 1890. During the past year 123 cases were notified of diseases named in the Act, as compared with 133 last year, and 114 in 1892. Of the total, 82 were cases of scarlet fever.

Small-Pox.—No case of smallpox was reported.

Measles.—Two deaths were returned from measles. One occurred at Cowling in a child of sixteen months in July, and the other at Salterforth in a child of five years, in August. This disease was prevalent at Draughton and Halton East in January, and at Lothersdale in December, and in both instances the school was closed in consequence. Measles is not included in the Notification Act in force, and individual cases are not reported.

Scarlatina.—One death only was returned from this cause. It occurred in the Skipton Joint Hospital, and was that of a child aged 3 years, one of a family of five children from Cononley who were isolated at the hospital. In all, 82 cases were notified during the year, and, of these, 46 were males and 36 females; 15 were under and 67 over five years of age. Of the total, 33 occurred in the Kildwick Sub-District, and 21 in the Gargrave Sub-District. The nearest approach to an epidemic took place at Cowling, when four single cases occurred in April, 13 in May, 1 in June, 5 in four houses in July, and 1 in August. The school attendance here was carefully watched, and care was taken to exclude all children from infected houses, and it was not found necessary to close the school. The disease here was very mild in type. Isolated outbreaks occurred as follows:—At Barden, 2 in one house in January; at Coniston Cold, 4 in one house in January; at Gargrave, 3 in two houses in January, 3 in February, 1 each in March, June, July, August and November

(7 of these were removed to the Skipton Hospital); at Earby, a single case in January; at Flasby, 5 cases in one house in January and February; at Addingham, single cases in February, July, and August; at Calton, 2 in one house in February; at Admergill, a single case in February; at Coates, a single case in April; at Cononley, 5 in one house in April, and 1 in July, all of which were removed to the Skipton Hospital; at Kelbrook, a single case in April; at Grassington, single cases in May, June, and August; at Stirton, 3 cases in one house in June and July, all removed to the Skipton Hospital; at Embsay, single cases in July and September, one of which was removed to Skipton Hospital; at Kettlewell, a single case in July; at Crosshills, 1 in September and 3 in October; at Salterforth, 2 in September, 2 in November, and 1 in December; at Beamsley, 3 in one house in September; and at Marton, a single case in December. Altogether 17 cases were isolated at the Joint Hospital at Skipton. The disease in most of the cases was very mild in type. In all instances precautions were given and disinfectants supplied.

Diphtheria.—No deaths was registered from diphtheria, but 5 cases were reported. Two of these occurred in an isolated house at Spen Head near Salterforth in January, a woman aged 34 and a girl aged 8. The house drainage was conveyed to a cesspool only six yards distant from the house, and this was full and smelling very offensively, and steps were taken to alter this. The others were single cases in children at Addingham in March, Cracoe in September, and Crosshills in November, and in no case was any insanitary condition of the premises found.

Membranous Croup.—Two deaths were returned under this head. The first of these took place at the Bolton Abbey Station Houses, in a child of 4, one of a family who suffered severely from scarlatina last year. At the back of these premises was an open

cesspool which received the sewage from this row of houses, which is the property of the Midland Railway Company. They had promised to have this altered, and to dispose of the sewage elsewhere, but the work had not been done. Notice was therefore served for the work to be done within a specified time, and it was complied with. The other death was that of a child, aged 4, at Earby in September. Nothing to account for the case was found on the premises. Another case was reported in a child of 2 years at Rylstone in December, who made a good recovery. The origin of this case was not traceable.

Typhoid Fever.—Three deaths were returned from typhoid fever, and these took place in Addingham, where the principal outbreak occurred. In all, 17 cases were notified during the year. Nine of these were males and eight females, two were under and fifteen over five years of age. Eleven of these cases occurred in Addingham, as well as one returned as “continued fever.” The first of these was an isolated case in a boy of 11 in February, the origin of which could not be ascertained. On March 16th the case notified as “continued fever” was reported, the patient a girl aged 18, in Main-street. This was a mild abortive attack, but in April five cases of typhoid fever were notified. On investigating the origin of these, there was nothing in common with them all except the water supply. This I found was obtained from a shallow or dipping well situated by the side of the beck in the middle of the village, and known as “Batty Well.” Not only was this liable to pollution from dipping vessels into it, but it was subject to overflow from the beck in times of flood, the stream being the common sewer of the village. The analysis of a sample of the water showed it to be badly polluted. Application was therefore made to the magistrates for an Order to close the well. Photographs of the well, showing its situation and surroundings, taken by Mr. Rodwell, were produced in Court, and the Order was obtained, and the well was walled up. Before this was done, however, the inhabitants using the well could not be convinced of its danger, and persisted, in drinking the water. As a result, two further cases occurred in May, and three in June. Thus, there were 11 cases in eight houses attributable to this cause. A single case in a boy of six occurred at Farnhill in January. Two cases in females of 18 and 27 respectively at Bell Busk were notified in January. These were very mild cases, and nothing insanitary was discovered on the premises. Isolated cases occurred at Grassington and at Earby in August. In the latter case great complaints were made of the smell from a privy, which was in a very foul condition and situated across a small yard from the house, and this was altered. The last case occurred at Gargrave in a man of 28, in September, living in River-place, where the drains which were notoriously bad were being altered for connection with the new sewerage. In all cases precautions were given and disinfectants supplied, but it was unfortunate that in the case of Addingham no hospital provision was available for the isolation of the cases, as the accommodation for such cases at their own houses was in several instances very unsatisfactory, and temporary quarters for isolation purposes were not obtainable.

Whooping Cough.—A single death was returned from this cause in a child of 11 months, at Embsay, in May.

Diarrhœa.—Six deaths were returned as due to diarrhœa. These occurred, one each at Grassington in August, Addingham in May, Earby in October, Thornton in November, and two at Farnhill in September and November. Three occurred in infants and three in adults.

Erysipelas.—A single death was returned from erysipelas in a woman of 86, at Grassington, in November. Fifteen cases were notified during the year. Of these 5 were males and 10 females; 1 was under five and 14 over five years of age.

Influenza.—Four deaths only were returned as due to influenza and its complications, as compared with 11 last year, and 19 in 1892.

Common Lodging-houses, Slaughter-houses, &c.—The *common lodging-houses* and *slaughter-houses*, which are duly registered, are regularly inspected, and fairly well kept. No instance of *overcrowding* has been reported, nor has, to my knowledge, any *unsound meat* been offered for sale. No *legal proceedings* have been taken. Under the Dairies, Cowsheds, and Milkshops Order, 1886, eighty-two dairies and cowsheds have been duly registered.

During the year 61 *canal boats* were inspected by Mr. Jonathan Rider, the Inspector under the Act, and their condition was found to be satisfactory. There were no *infringements*, except that two boats were without register, and this was obtained in both cases.

In Table VII. will be found a list of nuisances abated and minor sanitary improvements effected during the year.

TABLE VII.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c., completed in the year ending December 31st, 1894 :—

SUB-DISTRICT OF	Kettlewell.	Gargrave.	Barnoldswick.	Kildwick.	Skipton.	Addingham.	Grassington.	TOTAL.
Number of Complaints received . . . . .	..	2	2	7	..	1	2	14
House Drains repaired, cleansed, &c.	6	213	2	344	4	2	5	576
„ trapped and ventilated	13	267	4	406	3	7	2	702
Privies and Water Closets repaired, cleansed, &c. . . . .	..	2	1	2	..	..	..	5
Automatic Flushing Closets provided . . . . .	..	23	..	..	..	..	..	23
Water Closets provided (ordinary)	6	42	9	23	4	..	3	87
„ „ (slopwater) . . . . .	..	92	5	43	7	..	..	147
Pail Closets provided . . . . .	..	1	10	32	..	..	..	43
Water Supply, Houses provided with	1	..	22	42	..	5	..	70
Ashpits, new provided	1	24	21	48	..	..	3	97
Ashpits repaired, covered, &c. . . . .	..	..	..	1	..	..	..	1
Number of Ashpits ordered to be emptied . . . . .	..	..	2	3	1	..	..	6
Removal of accumulation of dung, stagnant } water, animal and other refuse }	..	3	..	2	..	2	3	10
Removal of Animals improperly kept . . . . .	..	1	..	..	..	..	..	1
Filthy Houses ordered to be cleansed . . . . .	..	..	..	..	..	1	..	1
Closure of Houses unfit for habitation . . . . .	..	..	1	..	..	..	1	2
Removal of Carcases . . . . .	..	..	..	..	1	..	1	2
New Urinals . . . . .	..	..	..	2	..	..	..	2
Eaves Troughs provided . . . . .	..	..	2	2	..	..	..	4
Removal of Cesspits	1	80	..	2	9	..	1	93
Common Lodging Houses inspected . . . . .	..	..	..	..	..	2	..	2
Slaughter Houses inspected . . . . .	..	3	6	8	5	5	2	29
Slaughter House Refuse, Pans provided . . . . .	..	..	..	..	..	1	..	1
Dairies and Cowsheds under inspection . . . . .	..	..	..	..	..	..	..	82
Canal Boats inspected (by Mr. Jonathan Rider) . . . . .	..	..	..	..	..	..	..	61
Plans approved . . . . .	..	..	..	..	..	..	..	68
Plans disapproved . . . . .	..	..	..	..	..	..	..	11

ASCOUGH RODWELL, Assoc. San. Inst. (Crt.), Inspector of Nuisances.

The following are requiring the attention of this Authority:—

- 1.—To take steps to improve the water supplies of Buckden, Kettlewell, Appletreewick, and Halton East.
- 2.—To complete the sewerage of Thornton, Earby, and Kelbrook, and of Carleton, Bradley, and Embsay.
- 3.—To prepare schemes for the proper sewerage of Cononley, Cowling, Farnhill, and Salterforth.
- 4.—To undertake by contract the proper scavenging of Thornton, Earby, and Kelbrook.

- 5.—The provision [under the Public Health (Interments) Act, 1879, or otherwise] of further burial accommodation for the townships of Glusburn, Kildwick, and Farnhill.
- 6.—To make application under section 276 of the Public Health Act, 1875, for Urban Powers under sections 150, 155, 156, and 160 (paragraph 1), for the contributory places of Addingham, Cononley, Cowling, Carleton, Glusburn, Gargrave, and Thornton.
- 8.—The provision of (*a*) a hospital for the isolation of cases of infectious disease, together with (*b*) efficient stoving apparatus for the disinfection of clothing, bedding, &c.; and (*c*) an ambulance for the proper removal of cases.

FRANCIS E. ATKINSON, L.R.C.P. (London), M.R.C.S.,
Medical Officer of Health.

To the Skipton Rural District Council,
March, 1895.

TABLE A.

TABLE OF DEATHS during the year 1894, in the Rural Sanitary District of SKIPTON, classified according to Diseases, Ages, and Localities, and showing also the population of such Localities, and the Births therein during the year.

1. Name of Locality adopted for the purpose of these Statistics: deaths in public institutions of persons belonging to the District being included.			POPULATION AT ALL AGES.		MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.											MORTALITY FROM SPECIFIED CAUSES, DISTINGUISHING DEATHS IN PERSONS UNDER FIVE YEARS OF AGE.																												
TOWNSHIPS.	1	2	3	4 Registered Births.					5 At all Ages.					6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34		
				M	F	T	M	F	T	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 60.	60 and upwards.	Under 5 5 upwds. Under 5 5 upwds. Under 5 5 upwds.	Smallpox.	Measles.	Scarlatina.	Diphtheria.	Croup, not "spasmodic."	Whooping Cough.	Typhus.	Continued Fevers. Enteric or Typhoid. Other or doubtful. Diarrhoea and Dysentery.	Cholera.	Rheumatic Fever.	Erysipelas.	Pyæmia.	Puerperal Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	Other Diseases.	Influenza.								
Kettlewell Sub-District			672	672	16	5	2	3	Under 5 5 upwds.
Gargrave Sub-District			2238	2244	45	28	7	2	1	2	3	13	Under 5 5 upwds.	
Barnoldswick Sub-District			3847	3858	134	65	10	9	3	2	19	22	Under 5 5 upwds.	...	1
Kildwick Sub-District			5993	6014	148	87	10	6	4	9	22	36	Under 5 5 upwds.	...	1
Skipton Sub-District			3225	3239	87	34	7	5	1	1	7	13	Under 5 5 upwds.	1
Addingham Sub-District			3139	3154	96	47	14	6	4	3	8	12	Under 5 5 upwds.
Grassington Sub-District			1551	1469	28	27	1	2	8	16	Under 5 5 upwds.
Total Rural Sanitary District			20,575	20,650	554	293	51	30	13	17	67	115	Under 5 5 upwds.	...	1
Total Deaths in Skipton Workhouse			4	2	1	5	Under 5 5 upwds.

TABLE B.

TABLE OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1894, in the Rural Sanitary District of Skipton; classified according to Diseases, Ages, and Localities.

NAME OF LOCALITIES adopted for the purpose of these Statistics ; Public Institutions being shown as separate localities.	Population at all Ages.		Aged under 5 or over 5.	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.										Number of such Cases removed from their Homes in the several Localities for treatment in Isolation Hospital.											
	Census 1881.	Census 1891.		Fevers.										Fevers.											
				Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.
Kettlewell Sub-District	854	672	{ Under 5 5 upwards	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gargrave "	2117	2238	{ Under 5 5 upwards	...	4 17	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Barnoldswick "	7290	3847	{ Under 5 5 upwards	...	2 8	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kildwick "	5593	5993	{ Under 5 5 upwards	...	7 26	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Skipton "	3681	3225	{ Under 5 5 upwards	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Addingham "	3237	3139	{ Under 5 5 upwards	...	1 7	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grassington "	1902	1461	{ Under 5 5 upwards	...	1 2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rural Sanitary District	24674	20575	{ Under 5 5 upwards	...	15 67	...	5	3	...	2 15	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...

SKIPTON

RURAL DISTRICT COUNCIL

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

1894.

KEIGHLEY

RURAL DISTRICT COUNCIL.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1894.

Area, 7,988 acres; Rateable Value (1894), £22,463; Inhabited Houses (1871), 1,140; (1881), 1,166; (1891), 1,279; Population enumerated (1871), 5,519; (1881), 5,416; (1891), 5,756; (estimated 1894), 5,858.

INSPECTION OF DISTRICT.—All parts of the district have been visited and inspected during the past year, with more or less frequency as circumstances required, by myself and the Inspector of Nuisances.

SANITARY CONDITION AND PROGRESS—WATER SUPPLY.—The village of Steeton was supplied with water by the Sanitary Authority in 1879, and this was subsequently extended to Eastburn. Sutton and Sutton Mill, and East Morton are supplied by private companies, and Morton Banks by the principal property owners. Outlying farms and groups of houses obtain their supply from springs and running streams. No extensions of public water mains have been laid this year.

SEWERAGE AND DRAINAGE.—At Steeton the drainage has been done in sections during the past few years, and the details of the work have appeared in the annual reports, but no means had been adopted for dealing with the sewage at the outfall. This year an agreement was made for the provisional purchase of 4a. 1r. 20p. of land for this purpose at £100 per acre, and plans were submitted for the approval of the Local Government Board. At Morton Banks a Local Government Board Inquiry was held in June last by Col. Ducat, R.E., when sanction was asked for a loan of £850 for Works of Sewerage and Sewage disposal for West Morton. This, however, was not granted, and the Sanitary Authority was requested to further consider the matter on account of the uncertainty as to the continued use of the land for disposal purposes under the agreement. The sum of £850 was increased to £1020 in August, and an agreement has just been concluded provisionally to purchase a fresh site for sewage disposal, and an application to the Local Government Board will shortly be made. Nothing further has been done with respect to the Sewerage of East Morton owing to the difficulty of acquiring land for disposal

purposes. A Local Government Board Inquiry was held in August last by F. H. Tullock, Esq., M.I.C.E., for sanction to borrow £8050 for Works of sewerage and sewage disposal for Sutton, Sutton Mill, and Eastburn. The Local Government Board required certain alterations in the plans submitted, and Mr. Broster, the engineer, attended at the Local Government Board Office with reference to these in November last. Sanction to this scheme had not been received at the end of the year. In other parts the private drainage of the older property is of rubble except where it has been altered, and the drains to all new property are properly laid in sanitary pipes.

EXCREMENT AND REFUSE DISPOSAL.—The privy-midden is the form of excrement disposal chiefly in use throughout the District. The older ones are mostly uncovered, but those of modern erection are constructed upon proper principles. The Sanitary Authority does not undertake the removal of refuse, but has adopted bye-laws assimilated to the models imposing this duty upon the householders. In 1892 the Authority obtained Urban Powers under Sec. 45 of the Public Health Act, 1875, and provided a public tip at Sutton. Difficulty is experienced in getting rid of the refuse, and receptacles are not emptied as frequently as they should be. It would be more satisfactory if the Authority either undertook this work or let it by contract.

BYE-LAWS AND URBAN POWERS.—This Authority possesses bye-laws with respect to "New Streets and Buildings," "Slaughter-houses," "Common Lodging-houses," and the "Cleansing of Footways, Privies, Cesspools, &c.," and these are assimilated to the model bye-laws. It is also in possession of Urban Powers under Section 45 and under Sections 160 and 161 (1st paragraph) for the whole District, and under Section 171 (sub-sect. 4) of the Public Health Act, 1875, for the township of Steeton. In April last the Sanitary Authority undertook the naming of the streets and numbering of the houses in Steeton and Sutton, but this has not yet been done in Morton. A series of regulations under the "Dairies, Cowsheds, and Milkshops Order of 1886," was issued in 1889, and the premises have been duly registered and inspected.

KEIGHLEY AND BINGLEY JOINT HOSPITAL BOARD.—Application was made by this Board for sanction to borrow £18,500 for the purchase of land and the erection of a Joint Permanent Hospital at Morton Banks, and a Local Government Board Inquiry was held by Dr. H. T. Bulstrode on the 28th of February last, when the plans and estimates were submitted. Sanction to this scheme was delayed, owing to near proximity of the temporary Small Pox Hospital to the proposed site of the other buildings belonging to the permanent Infectious Hospital, and the Hospital Board had to give an undertaking that no building or any part of the site be used for the reception of small pox cases at the same time that other infectious diseases are under treatment in any other building on the site. It is to be hoped that before long this Joint Hospital Board will be enlarged by the addition of the three Worth Valley authorities, the Oxenhope Local Board, the farthest distant, having already consented to join.

POPULATION.—At the census of 1871, the population was 5,519, living in 1,140 houses; and that of 1881 was 5,416, living in 1,166 houses. At the census of 1891 it was found to be 5,756, living in 1,279 houses, or an increase of 340. I have estimated it up to the middle of 1894 to be 5,858, living in 1,363 houses, or an average of 4·2 per house. The population is distributed among the three townships as follows:—Morton, 2,182; Steeton-cum-Eastburn, 1,714; and Sutton, 1,962.

BIRTHS.—The total births registered were 118 in number (58 males and 60 females.) This is a decrease of 8 from last year, and is equivalent to an annual birth-rate of 20·1 per 1,000, as compared with 21·6 last year and 21·4 in 1892. The births were distributed as follows:—Morton, 41; Steeton-cum-Eastburn, 40; Sutton, 37; giving respective birth-rates of 18·7, 23·3 and 18·8 for the three townships. The natural increase to the population is 47.

DEATHS.—The total deaths returned were 72 in number (36 males and 36 females). One of these has to be deducted as belonging to the Bingley Urban District. This is a decrease of 16 from last year and is equivalent to a death-rate of 12·1 per 1,000 living, as compared with 14·9 last year and 13·2 in 1892. The deaths were distributed as follows:—Morton, 28; Steeton-cum-Eastburn, 21; and Sutton, 22; giving respective death-rates of 12·8, 12·2 and 11·2.

The deaths occurring during each quarter for the last 11 years were as follows:—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
1884	17	29	25	22
1885	19	31	20	29
1886	22	18	23	27
1887	18	25	17	28
1888	20	21	13	24
1889	13	13	22	19
1890	40	46	26	24
1891	17	29	27	23
1892	18	22	20	17
1893	27	14	22	23
1894	14	20	15	23

MORALITY AS TO AGE.

	MORTON.	STEETON- CUM- EASTBURN.	SUTTON.	TOTAL.
Deaths under 1 year	7	3	1	11
„ over 1 and under 5	3	...	5	8
„ „ 5 „ 15	2	1	2	5
„ „ 15 „ 25	1	1	3	5
„ „ 25 „ 60	8	7	3	18
„ „ 60	8	9	8	25
At all ages	29	21	22	72

TABLES A AND B.

Tables of Mortality and Sickness in the Rural Sanitary District of Keighley for the twelve calendar months ending December 31st, 1894 :—

NAME OF DISEASE.	(A) TOTAL DEATHS REGISTERED IN THE DISTRICT.							
	MORTON.		STEETON-CUM-EASTBURN		SUTTON.		KEIGHLEY R.S.D.	
— 5 means under 5 years of age	—5	+5	—5	+5	—5	+5	—5	+5
+ 5 means over 5 years of age								
Smallpox .....	...	1	...	...	...	...	...	1
Measles .....	...	...	...	...	...	...	...	...
Scarlatina .....	...	...	...	1	...	...	...	1
Diphtheria .....	...	...	...	...	...	...	...	...
Croup (not "spasmodic") .....	...	...	...	...	...	...	...	...
Whooping Cough	2	...	...	...	...	...	2	...
"Continued" { Typhus .....	...	...	...	...	...	...	...	...
Fevers. { Enteric or Typhoid .....	...	1	...	1	...	1	...	3
{ Of other or doubtful sorts...	...	...	...	...	...	...	...	...
Diarrhœa and Dysentery.....	...	...	...	...	...	...	...	...
Cholera .....	...	...	...	...	...	...	...	...
Rheumatic Fever .....	...	1	...	2	...	...	...	3
Erysipelas .....	...	...	...	...	...	...	...	...
Pyæmia .....	...	...	...	...	...	...	...	...
Puerperal Fever.. ..	...	...	...	...	...	...	...	...
Ague .....	...	...	...	...	...	...	...	...
Phthisis .....	...	...	...	2	...	3	...	5
Bronchitis, Pneumonia, and Pleurisy	6	2	...	2	...	3	6	7
Heart Disease .....	...	2	...	2	...	1	...	5
Injuries .....	...	1	...	1	...	...	...	2
Diseases not named above	2	11	3	7	6	7	11	25
Influenza.....	...	...	...	...	...	1	...	1
Total.....	10	19	3	18	6	16	19	53

NAME OF DISEASE.	(B) INFECTIOUS SICKNESS.							
	MORTON.		STEETON-CUM-EASTBURN		SUTTON.		KEIGHLEY R.S.D.	
— 5 means under 5 years of age	—5	+5	—5	+5	—5	+5	—5	+5
+ 5 means over 5 years of age.....								
Smallpox .....	...	...	...	...	...	...	...	...
Scarlatina	2	10	7	11	...	1	9	22
Diphtheria .....	...	...	...	...	...	...	...	...
Membranous Croup .....	...	...	...	...	...	...	...	...
Fevers. { Typhus .....	...	...	...	...	...	...	...	...
{ Enteric or Typhoid .....	...	1	...	1	...	1	...	3
{ Continued .....	...	...	...	...	...	...	...	...
{ Relapsing .....	...	...	...	...	...	...	...	...
{ Puerperal .....	...	...	...	...	...	...	...	...
Cholera .....	...	...	...	...	...	...	...	...
Erysipelas .....	...	3	...	3	...	...	...	6
Total	2	14	7	15	...	2	9	31

TABLE I.

Table showing the estimated population, births, and deaths for the years 1884-94 inclusive, with the average for the decade, 1878-87:—

Year.	Population estimated to middle of Year.	Births.	Deaths.
1884	5580	151	93
1885	5640	134	100
1886	5710	165	90
1887	5770	124	88
Average for decade 1878-87	5647	142	94
1888	5820	139	78
1889	5880	155	67
1890	5890	126	136
1891	Census. 5756	149	96
1892	5790	124	77
1893	5824	126	87
1894	5858	118	71

The number of both Births and Deaths is considerably below the average.

TABLE II.

Table showing the annual birth-rate, rates of mortality, death-rates among children, and deaths in public institutions, during the eleven years 1884-94, inclusive, and the mean average for the decade 1878-87:—

Year	Birth-rate per 1000 of the Population.	Annual rate of mortality per 1000 living.	Deaths of Children under 1 year; percentage of total deaths.	Percentage of deaths of Children under 1 year to registered births.	Deaths of Children under 5 years; percentage of total deaths.	Total number of deaths in Public Institutions.
1884	27·0	16·6	15·0	9·2	25·1	...
1885	23·7	17·7	17·0	12·6	32·0	1
1886	28·8	15·7	24·4	13·3	26·6	...
1887	21·4	15·2	22·7	16·1	38·6	...
Average for Decade 1878-87	25·1	16·7	18·3	12·2	28·9	...
1888	23·8	13·4	17·9	10·0	28·1	...
1889	26·3	11·5	27·9	12·2	29·4	1
1890	21·2	22·9	9·5	10·3	26·4	...
1891	25·8	16·6	14·5	9·3	35·4	...
1892	21·4	13·2	22·0	13·7	28·5	...
1893	21·6	14·9	14·9	10·3	17·2	...
1894	20·1	12·1	15·4	9·3	26·7	...

The birth-rate is the lowest ever recorded, and is 5·0 below the mean for the ten years, 1878-87, and 3·5 below that for the last six years. The general death-rate is, with one exception in 1889, the lowest on record, and is 4·6 below the mean for the decade 1878-87, and 3·3 below that for the past six years. The infant mortality is considerably below the average, as well as the percentages to total deaths, of deaths of Children under 1 and under 5 years of age. Among persons aged 60 and upwards there were 25 deaths, or a percentage to the total deaths of 35·2.

MEAN AGE AT DEATH.—The mean age at death this year is 36·9 (32·1 for males and 41·6 for females), as compared with 42·6 last year and 40·4 in 1892.

TABLE III.

Table showing number of deaths certified by registered medical practitioners, uncertified deaths, and inquests, with their percentage to total deaths, during the years 1892, 1893, and 1894.

	Deaths.			Percentage of Total Deaths.		
	1892	1893	1894	1892	1893	1894
Certified	68	81	66	88·3	93·1	92·9
Uncertified	7	4	2	9·0	4·5	2·8
Inquests	2	2	3	2·5	2·1	4·2

UNCERTIFIED DEATHS IN 1894.

Locality.	Age.	Sex.	Cause Assigned.
East Morton.....	6 hours	F	Premature Birth, Convulsions
Morton Banks	1 day	F	Bronchitis

There were only two uncertified deaths, being the smallest number recorded in any year.

TABLE IV.

Table showing the mortality from certain classes of diseases, and proportions to population and to 1,000 deaths, in the years 1892, 1893 and 1894.

	Total Deaths.			Deaths per 1000 of Population.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894	1892	1893	1894
1. Seven Principal Zymotic Diseases	7	7	6	1·2	1·2	1·0	90·9	80·4	84·5
2. Pulmonary Diseases (other than Phthisis	16	8	13	2·7	1·3	2·2	207	91·9	183
3. Tubercular Diseases	8	15	7	1·3	2·5	1·1	103	172	98·5
4. Wasting Diseases of Infants	7	4	5	1·2	0·6	0·8	90·9	45·9	0·74
5. Convulsive Diseases of Infants.....	5	3	4	0·8	0·5	0·6	64·9	34·4	56·3

NOTES.

1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, Diarrhœa and Dysentery.
3. Includes Phthisis, Scrofula, Rickets, and Tabes.
4. Includes Marasmus, Atrophy, Debility, Want of Breast-milk, and Premature Birth.
5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

The number of deaths due to Pulmonary Diseases, though an increase upon last year, is below the average. There is a considerable reduction in those due to Tubercular Diseases, and a slight increase in those from Wasting and Convulsive Diseases of Infants.

TABLE V.

Table showing the number of deaths from the seven principal Zymotic Diseases in the years 1892, 1893, and 1894.

Disease.	Total Deaths.			Proportion of death to 1000 deaths.		
	1892	1893	1894	1892	1893	1894
Smallpox .....	...	1	...	...	11·4	...
Measles .....	...	...	...	...	...	...
Scarlet Fever.....	...	...	1	...	...	14·0
Diphtheria.....	...	Croup 1	...	...	11·4	...
Whooping Cough.....	4	...	2	51·9	...	28·1
Fever	2	...	3	25·9	...	42·2
Diarrhœa	1	5	...	12·9	57·4	...
TOTALS.....	7	7	6	90·9	80·4	84·5

Six deaths were returned from Zymotic disease as compared with seven in each of the two previous years. This is equivalent to a Zymotic rate of 1·0 per 1000 living. Forty certificates were received under the Infectious Diseases (Notification) Act, 1889, as compared with thirty-seven last year.

SCARLATINA.—A single death was returned from this cause, in a boy of 5 years, at Steeton, in October. During the year 31 cases were reported, of these, 16 were males and 15 females, 9 were under five years of age and 22 over. There were seven cases in four houses at East Morton in January. This was the continuation of a small outbreak at the end of 1893 when the disease was imported from Bingley. There were four cases in two houses at East Morton in May. A single case was reported from Sutton in May. Another single case occurred at Eastburn in September. The principal outbreak during the year took place at Steeton, commencing at the end of September. Between then and the end of the year there were seventeen cases in nine houses. The school attendance was watched, and care taken to exclude all children from infected houses, and the last case was notified on December 19th. Precautions were given and disinfectants supplied in all cases.

TYPHOID FEVER.—Only three cases of typhoid fever were notified during the year, one in each township, but all three were fatal cases. The first of these occurred at Steeton in March and was that of a solicitor, aged 31. He had been from home and returned ill, and it is most probable that the disease was contracted elsewhere. The next case at the end of September was that of a girl of 19, living in Sutton Mill. This case was reported on September 28th and died before I saw it on the 29th, after nine days illness. The house was a new one and there was no

sanitary defect found on the premises. The other case was that of a lad aged 18, at East Morton in December. In his case the disease appeared to have been contracted in Keighley where he worked.

WHOPING COUGH.—Two deaths were returned from whooping cough, followed by pneumonia in infants at East Morton, in March and April.

ERYSIPELAS.—Six cases of erysipelas were notified, three from Morton and three from Steeton. Of these, two were males and four females, and all were adults.

INFLUENZA.—A single death was registered as due to "Influenza and chronic bronchitis," in a woman of 64, at Sutton, in January.

TABLE VI.

Table showing the population, births, deaths, birth-rates, death-rates, and percentages of deaths at certain ages and for certain diseases in each township of the District during 1894.

Sub-District.	Population.	Births.	Deaths.	Annual Rate per 1000 living.			Percentage of deaths under 1 year to total deaths.	Percentage of deaths under 1 year to registered births.	Percentage of deaths under 5 years to total deaths.	Percentage of deaths of persons aged 60 and upwards to total deaths.	Percentage of deaths to total deaths.			
				Births.	Deaths.	Deaths from 7 principal Zymotic Diseases.					From Violence	Phthisis	Bronchitis, Pneumonia, Pleurisy.	Heart Disease.
Morton	2182	41	28	18·7	12·8	1·3	25·0	17·0	35·7	28·5	3·5	...	28·5	7·1
Steeton-cum-Eastburn	1714	40	21	23·3	12·2	1·1	14·2	7·5	14·2	42·8	4·7	9·5	9·5	9·5
Sutton	1962	37	22	18·8	11·2	0·5	4·5	2·7	27·6	36·3	...	13·6	13·6	4·5
Keighley Rural Sanitary District... }	5858	118	71	20·1	12·1	1·0	15·4	9·3	26·7	35·2	2·8	7·0	18·3	7·0

The Morton township has the highest death-rate, zymotic rate, and infant mortality this year, while all three are lowest in the Sutton township.

TABLE VII.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c., completed in the year ending December 31st, 1894.

	Morton.	Steeton.	Sutton.
House Drains Repaired, Cleansed, &c.	4	5	1
House Drains, Trapped and Ventilated.....	1	2	1
Water Closets supplied with Water	1	0	0
Water Closets provided	1	0	0

INSPECTOR'S REPORT OF THE SANITARY WORK (Continued.)

	Morton.		Steeton.		Sutton.
Pail Closets provided	0	...	4	...	0
Closets provided (Duckett's Tippers).....	0	...	5	...	0
Water Supply, Houses provided with.....	2	...	0	...	3
Ashpits, new provided	0	...	0	...	2
„ Repaired, Covered, &c.....	0	...	1	...	0
No. of Ashpits ordered to be emptied	4	...	12	...	3
Removal of accumulation of Dung, Stagnant Water, } Animal and other Refuse	1	...	1	...	1
Smoke Records taken	10	...	10	...	15
Houses Disinfected after Infectious Disease	9	...	11	...	0
Schools Disinfected „	1	...	1	...	0
Slaughter Houses inspected.....	3	...	2	...	3
Bakehouses inspected	2	...	0	...	1
Dairies and Cowsheds inspected.....	11	...	10	...	10
Milkshops inspected	1	...	0	...	0
Canal Boats inspected	24	...	0	...	0

EDWIN SKAIFE, *Inspector of Nuisances.*

SLAUGHTER-HOUSES, &c.—The eight *Slaughter-houses*, which are registered, and the three *Bakehouses* have been regularly inspected, and are fairly well kept. There is no *Common Lodging-house* in the district. No instance of *over-crowding* has been reported, nor has, to my knowledge, any *unsound meat* been exposed for sale. There are no *noxious trades*. *Legal Proceedings* have not been necessary for the abatement of nuisances. *The Dairies, Cow-sheds, and Milkshops*, 32 in number, which are registered, have been regularly inspected. The *Canal Boats* passing through the district are also inspected. The factory chimneys in the district are watched, and any excessive *smoke* is noted by the Inspector of Nuisances.

The matters requiring the attention of the Authority are :—

- 1.—The provision of proper means of sewerage for East Morton and Morton Banks, and the carrying out of the sewerage scheme for Sutton, Sutton Mill, and Eastburn.
- 2.—The completion of the outfall works for the sewerage of Steeton.
- 3.—The naming of the streets and numbering of the houses in the township of Morton.
- 4.—To consider the undertaking by the Authority (by contract or otherwise) of the removal of the nightsoil and ashpit refuse in all three townships.

FRANCIS E. ATKINSON, L.R.C.P. (London), M.R.C.S.,
Medical Officer of Health.

The Keighley Rural District Council,
February, 1895.

KEIGLEY

RURAL DISTRICT COUNCIL

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1894.

SKIPTON

URBAN DISTRICT COUNCIL.

Annual Report of the Medical Officer of Health
for the Year 1894.

Area, 4,245 acres; *Rateable Value* (1894), £29,619; *Inhabited Houses* (1871), 1,238; (1881), 1,795; (1891), 2,060; *Population enumerated* (1871), 6,078; (1881), 9,091; (1891), 10,376; *Estimated* (1894), 10,760.

Inspection of District.—The District has been regularly inspected during the past year by myself and the Inspector of Nuisances, and special visits have been made in connection with outbreaks of infectious disease. On the division of the town into wards a special house-to-house survey was commenced, beginning with the Middletown, or East Ward, and this is in progress.

Sanitary Condition and Progress—Water Supply.—The town is supplied with water by gravitation from Whinny Gill Reservoir on Short Bank, as well as from the old reservoirs of much smaller capacity. The efforts of the Board to improve the inflow of water to the reservoir have been concluded during the year, and the result has been eminently satisfactory. No shortness of supply has been experienced. There has been no extension of mains laid this year.

A Local Government Board Inquiry was held in August last, by Col. Hasted, into an application for borrowing powers to enable the Local Board to become the owners of the "Eastby Mills" property and water rights. At the close of the year the Order had not been received.

Sewerage and Drainage.—The town is provided with a system of sewers, and the sewage is dealt with by irrigation at the outfall upon a sewage farm. Proper means, however, are not provided throughout the system for efficient flushing and ventilation. The former can be better dealt with when an increased water supply becomes available. The latter is effected chiefly by means of the street gullies, and these are in consequence a source of frequent nuisance and danger to health. There has been no extension of main sewers this year, with the exception of a short length in Craven-street. Arrangements have been made with the Earl of Thanet's trustees, the holders of building land in the neighbourhood, for the construction of a sewer of large dimensions in Middletown, to accommodate present and expected buildings. The Local Board has also arranged for, and is now constructing a fresh water drain in Middletown, to carry away surface water which for some time past has accumulated in this part of the District.

Excrement and Refuse Disposal.—Excrement disposal in Skipton is chiefly effected by means of water closets. In most instances these are situated outside in the yard, and are dependent upon hand-flushing. The majority of the ashpits in the town are uncovered, and they are made the receptacles for all manner of vegetable and other refuse, in addition to the ashes. Since the Board does not undertake the scavenging, the emptying of these by the householders is frequently postponed as long as possible, and not done until a nuisance is caused. In no less than 122 such instances has a Board's notice been served during the year. Such a state of things can only be effectually dealt with by the Authority itself's

undertaking the removal of refuse. This would have a very beneficial effect in producing greater cleanliness in the back yards and streets of the town, and freedom from foul emanations in the proximity of dwellings. It is to be hoped that the new District Council will at an early date seriously reconsider the question of undertaking this work, as well as the provision of a destructor for destroying the ashpit refuse.

Byelaws, &c.—This Authority possesses a code of byelaws closely assimilated to the “Models” with respect to “New Streets and Buildings,” “Slaughter Houses,” and “Common Lodging Houses.” These were allowed by the Local Government Board in April, 1880. A series of Regulations under the “Dairies, Cowsheds, and Milkshops Order, 1886,” was adopted near the end of 1891, and the occupiers have been duly registered, and the premises kept under supervision.

Acts of Parliament adopted.—The “Infectious Diseases (Notification) Act, 1889,” was adopted, and came into force on January 1st, 1890. Parts II., III., and V. of the “Public Health Acts (Amendment) Act, 1890,” were adopted in February, 1891. The “Private Streets’ Works Act, 1892,” was adopted in 1893.

Street Improvements.—Arrangements have been made for the widening of a portion of Brook-street, and laying down causeways along the part which is not now accommodated in that respect. The causeways in Gargrave-road are being improved. Flagged causeways, with requisite crossings, are being substituted in some parts for the old macadamized causeways; and in other parts the causeways are being asphalted. Arrangements have been made for the purchase of a steam road roller, for use in the repair of roads in the District. Borrowing powers for the purpose of raising the money to defray the cost are daily expected.

Division into Wards.—Application was made to the County Council under sec. 57 (sub-sec. 1) of the “Local Government Act, 1888,” for the division of the District into four Wards. A Local Inquiry was held in May last, and the Order was granted on July 11th. The area and boundaries of the Wards are the same as were submitted in the application for a Charter of Incorporation.

Local Board Offices.—During the year the Local Board has entered into a provisional contract for the purchase of the large building locally known as the “Town Hall,” the property of a Limited Liability Company. The requisite borrowing powers have been obtained from the Local Government Board; and it is proposed to take over the buildings on the 1st January, 1895, and to convert portions of them into public offices for the use of the Board and its officers.

Allotments.—No additional provision has been made of Allotments for the labouring classes. Arrangements have, however, been made for the labouring men in Middletown having placed at their disposal a field in the locality for the purposes of Allotments; and it is expected that possession of this field will be obtained on the 2nd February next.

Infectious Hospital.—During the year, plans have been prepared by Messrs. Robinson & Broughton, Architects, of Skipton, for a permanent hospital, which it is proposed to erect on a new site on elevated ground above and on the East of the canal and nearly opposite the present temporary hospital on the Skipton Sewage Farm. A provisional agreement has been made with Lord Hothfield for the purchase of the site. Difficulty has been experienced in arranging the position of the proposed blocks of buildings on the site, owing to the land’s having a considerable slope. Upon my recommendation a deputation visited and inspected the new Fever Hospital at Blackburn in September last.

It is to be hoped that no unnecessary time will be lost in submitting the plans to the Local Government Board, and when sanctioned in proceeding with the work.

The Joint Temporary Hospital was used this year for the isolation of 22 cases of scarlet fever from the Urban District, and 17 from the Rural.

HOSPITAL ERECTED IN 1888.

SKIPTON URBAN SANITARY DISTRICT.					
Year.	CASES ADMITTED FROM				
	Smallpox.	Scarlet Fever.	Typhoid Fever.	Measles.	Total.
1888	1	1
1889	1	..	1	..	2
1890	6	3	..	9
1891	12	2	..	14
1892	71	..	..	71
1893	72	..	..	72
1894	22	..	..	22

One death only occurred in the hospital, that of a Rural case.

Population.—In 1871 the population of Skipton was 6,078, and that of 1881 was 9,091. At the census of 1891, it was found to be 10,376 (an increase of 1,285), living in 2,060 houses, or an average of 4·1 per house. Up to the middle of 1894, I have estimated it to be 10,760, living in 2,302 houses, or an average of 4·6 per house.

Births.—The total births registered were 307 in number (162 males and 145 females). This is a decrease of 42 from last year, and is equivalent to an annual birth-rate of 28·5 per 1000 living, as compared with 32·8 last year, and 30·1 in 1892. The natural increase to the population is 170, as against 140 last year, and 128 in 1892.

Deaths.—The total deaths returned from this District were 148 in number, inclusive of 6 which belonged to the Rural District, and 5 to the Barnoldswick Urban, which occurred in the Skipton Workhouse. When these are deducted, a total is left of 137 belonging to the Skipton Urban District (71 males and 66 females), which is equivalent to a death-rate of 12·7 per 1000 living, as compared with 19·6 last year, and 18·0 in 1892.

The figures in brackets in the following Table show all the deaths which took place in the Skipton Workhouse, 18 in number. These have, of course, been assigned to their proper districts in calculating their respective rates.

The deaths occurred in each quarter as follows:—

	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.	
1884	35	(6)	....	36	(5)	....	51	(5)
1885	52	(7)	....	52	(2)	....	30	(8)
1886	55	(10)	....	33	(5)	....	87	(6)
1887	49	(9)	....	45	(6)	....	43	(9)
1888	54	(12)	....	50	(12)	....	44	(9)
1889	37	(3)	....	38	(1)	....	33	(2)
1890	44	(6)	....	40	(2)	....	33	(5)
1891	47	(3)	....	62	(12)	....	39	(2)
1892	43	(7)	....	40	(3)	....	45	(5)
1893	54	(9)	....	43	(5)	....	44	(6)
1894	26	(6)	....	28	(7)	....	30	(1)

The mortality as to age was as follows :—

Deaths under	1 year of age.	34	} 58 under 5 years of age.
„ over	1 year and under 5	24	
„ „	5 „ 15	4	} 79 over 5 years of age.
„ „	15 „ 25	6	
„ „	25 „ 60	31	
„ „	60.....	38	
Total	137	

TABLE I.

Table showing the estimated population, births, and deaths, for the years 1884-1894 inclusive, with an average for the decade 1878-87:—

Year.	Population estimated to middle of the year.	Births.	Deaths.
1884	9,950	353	189
1885	10,000	290	210
1886	10,300	328	176
1887	10,600	302	258
Average for decade 1878-87	9,645	322	187
1888	11,000	388	210
1889	11,400	356	143
1890	11,700	322	165
1891	<small>CENSUS.</small> 10,376	354	186
1892	10,500	317	189
1893	10,630	349	209
1894	10,760	307	137

The number of deaths is the smallest annual number recorded for the past twenty-one years.

TABLE II.

Table showing the annual birth-rate, rates of mortality, death-rates among children, and deaths in public institutions, during the years 1884-94 inclusive, and the mean for the decade 1878-87:—

Year.	Birth-rate per 1000 of the Population.	Annual Rate of mortality per 1000 living.	Deaths of Children under 1 year; percentage of total deaths.	Percentage of deaths of Children under 1 year to registered births.	Deaths of Children under 5 years; percentage of total deaths.	Total number of deaths in Public Institutions.
1884	35·4	18·9	20·0	10·7	34·3	16
1885	29·0	21·0	26·6	19·3	44·2	14
1886	31·8	17·0	27·8	14·9	41·4	8
1887	28·4	24·1	23·4	19·8	54·2	15
Mean for decade 1878-87.	33·6	19·2	24·0	14·2	40·4	13
1888	35·2	19·0	28·5	15·4	36·1	18
1889	31·2	12·5	26·5	10·6	34·2	11
1890	27·5	14·1	29·6	15·2	43·6	15
1891	34·1	17·9	22·5	12·2	34·9	18
1892	30·1	18·0	21·6	12·9	36·5	21
1893	32·8	19·6	20·5	12·3	40·6	28
1894	28·5	12·7	24·8	11·0	42·3	18

The birth-rate has only been lower on two occasions (viz., 1887 and 1890) during the past twenty-one years, while the general death-rate has only once been lower (viz., in 1889, when it was 12·5) during the same period. The infant mortality, calculated on the number of deaths of children under one year per cent. of registered births, is 2·8 below the mean for the past sixteen years, but the proportion of deaths of children under five years to the total deaths is much higher than it should be, viz., 42·3 per cent. Among persons aged 60 and upwards there were 38 deaths, or a percentage to total deaths of 27·7, which is the lowest in the Combined District.

TABLE III.

Table showing number of deaths certified by registered medical practitioners, uncertified deaths, and inquests, with their percentage to total deaths, during the years 1892, 1893, and 1894:—

	Total Deaths.			Percentage of Total Deaths.		
	1892.	1893.	1894.	1892.	1893.	1894.
Certified	174	192	127	92·0	91·8	92·7
Uncertified	8	11	6	4·2	5·2	4·3
Inquests	7	6	4	3·7	2·8	2·9

UNCERTIFIED DEATHS IN 1894.

Cause Assigned.	Sex.	Age.
Probably Apoplexy	F	45
Paralysis from Injury to Spinal Cord	M	67
Convulsions.....	M	1 month
Heart Disease.....	F	51
Probably Convulsions.....	F	6 days
Supposed Infantile Convulsions	M	3 months

TABLE IV.

Table showing the mortality from certain classes of disease during the five years 1890-94 (inclusive).

	1890	1891	1892	1893	1894
1. Seven Principal Zymotic Diseases.....	17	7	26	43	5
2. Pulmonary Diseases (other than Phthisis)	51	44	43	34	36
3. Tubercular Diseases	25	23	23	22	16
4. Wasting Diseases of Infants	10	16	14	14	10
5. Convulsive Diseases of Infants	7	12	12	13	14

NOTES.

1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, and Diarrhoea.
3. Includes Phthisis, Scrofula, Rickets, and Tabes.
4. Includes Marasmus, Atrophy, Debility, Want of Breast-milk, and Premature Birth.
5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

It will be seen that there is a considerable reduction this year in the deaths due to Tubercular diseases, and this is the lowest annual number on record. There is also a slight reduction this year on the deaths from Wasting diseases of infants.

TABLE V.

Table showing the number of deaths from the seven principal Zymotic Diseases during the three years 1892, 1893, and 1894, with their proportion to 1,000 deaths:—

Disease.	Deaths.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894
Smallpox .....	..	1	..	..	4·7	..
Measles .....	..	17	1	..	81·3	7·3
Scarlet Fever	12	9	1	63·4	43·0	7·3
Diphtheria .....	..	1	^{Croup} 1	..	4·7	7·3
Whooping Cough.....	5	2	1	26·4	9·5	7·3
Fever.....	1	6	..	5·2	28·7	..
Diarrhoea	8	7	1	42·3	33·4	7·3
Totals	26	43	5	137·5	205·7	43·7

Only five deaths were returned under the head of zymotic disease, as compared with 43 last year, and 26 in 1892. This is equivalent to a zymotic rate of 0·4 per thousand living. Fifty-two certificates under the Infectious Diseases Notification Act, 1889, were received, as compared with 192 last year.

Measles.—A single death was registered from measles, complicated with pneumonia, in a child of three years, in May.

Scarlatina.—Two deaths were registered from scarlet fever, but one of these occurred in the Joint Hospital, and was that of a child aged 3, from Cononley in the Skipton Rural District. One death occurred in Skipton, that of a boy of 4 in Dawson-street, in July. There was no further spread in this house. Twenty-eight other cases were notified during the year; of these 11 were males, and 17 females, 4 were under five years of age, and 24 over five years. Of the total 29 cases, 22 were removed from their homes to the hospital, and all recovered. The cases occurred throughout the year, but mostly during May and June, and were not limited to any particular part of the town. They were notified as follows:—2 single cases in January, 2 in March, 8 in seven houses in May, 8 in 5 houses in June, 2 in July, 2 in August, 1 in September, and 4 in November. In all cases precautions were given and disinfectants supplied, and the premises were fumigated after the removal or recovery of the case.

Diphtheria.—A single case of diphtheria was reported in March, in a girl of 15 living in Newmarket-street. Here a rainfall pipe was found connected directly with the drain. No further cases occurred in the family of nine.

Membranous Croup.—Two cases of membranous croup were reported in August, in children of four years of age in Bennett Street and Pembroke Street, and the first of them ended fatally. There was no insanitary condition found on the premises.

Whooping Cough.—One death was returned from whooping cough in June, in a child of twelve months.

Typhoid Fever.—There was no death returned from this cause, and only three cases were notified. The first occurred in March, in Duckett Street, and was that of a man aged 30. There was no clue to the origin of this case. The next was a woman aged 26, living in Caroline Square, and occurred in June. Here the slopstone pipe was improperly disconnected, and there was a possible escape of sewer gas into the house. The other case occurred in Commercial Street, in November, in a man of 43. He only came into the District a week before, and must have previously contracted the disease.

Diarrhœa.—A single death was registered from this cause. It occurred in September, in Hothfield Terrace, and was that of a child aged four years.

Erysipelas.—Seventeen cases of erysipelas were notified during the year. They were distributed throughout the year, and were not confined to any part of the town. No sanitary defects were found on examination of the premises. Of the cases, 6 were males and 11 females, and all were over five years of age.

Influenza.—Two deaths were ascribed to influenza and its complications, in males of 47 and 59, in March and April.

TABLE VI.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c.,

Completed in the year ending December 31st, 1894:—

Number of Complaints received	24
„ Houses, Premises, &c., inspected	374
House Drains repaired, cleansed, &c.	52
„ trapped and ventilated	77
Privies and Water Closets repaired, cleansed, &c.....	61
„ supplied with water	42
Water Closets provided	42
Water Supply, Houses provided with	44
Ashpits, new provided	45
„ repaired, covered, &c.	14
Number of Ashpits ordered to be emptied	122
Removal of accumulation of dung, stagnant water, animal and other refuse....	39
„ animals improperly kept	8
Filthy Houses ordered to be cleansed	6
Overcrowding	3
Seizure of unsound meat.....	1
Smoke Records taken.....	1
Offensive Trades complained of.....	4
Houses disinfected after infectious disease	35
Schools disinfected „	3
Common Lodging Houses inspected	14
Slaughter-houses inspected	9
Dairies and Cowsheds inspected	16
Milkshops inspected	8
Canal Boats inspected	250

JOSEPH ACKERNLEY,

Certificated Inspector of Nuisances.

Common Lodging-Houses, Slaughter-Houses, &c.—The Common Lodging-houses and Slaughter-houses have been regularly inspected and are fairly well kept. In connection with *noxious trades*, nuisances were complained of at two tripe boiling shops. In one of these sufficient cleanliness had not been observed, and in the other certain structural alterations in the premises were required. A complaint was made of smoke from the tallow works in Laycock's yard, and of smell from a rag and bone warehouse in Coach-street, and in the latter case the accumulation was removed. In six cases *filthy houses* were ordered to be cleansed, and in three instances of *overcrowding* notices were served for their abatement. Under the head of *unsound meat*, a consignment of fish to a hawker was seized and condemned, and the fish destroyed. Mr. J. Ackernley was appointed inspector under the Canal Boats Act, and during the year 250 boats have been boarded and examined. Six were found without certificate of registration, three required repairs, one required cleansing, one was overcrowded, and one had children on board who should have been at school. The necessary steps were taken in each case.

Legal Proceedings have not been necessary during the year.

The matters which require the attention of the Board are :—

1. The carrying out of a scheme for the augmentation of the water supply, so as to ensure a constant supply to the town for all purposes.
2. The provision of adequate means for the flushing and proper ventilation of the main sewers in Middletown, and the proper paving and channelling of the back streets in Middletown and Newtown.
3. The carrying out, with as little delay as possible, of the scheme for the provision of a permanent hospital for the isolation of infectious diseases, and of efficient apparatus for the proper disinfection of bedding, clothing, &c.
4. The undertaking by the Board of the removal of ashpit and household refuse, and to consider the question of the provision of a proper Destructor for the same.

FRANCIS E. ATKINSON, L.R.C.P. (London), M.R.C.S.

Medical Officer of Health.

To the Skipton Urban District Council,
February, 1895.

SKIPTON

URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

1894.

SILSDEN

URBAN DISTRICT COUNCIL.

Annual Report of the Medical Officer of Health for the Year 1894.

Area, 7,060 acres ; *Rateable Value* (1894), £11,619 ; *Inhabited Houses* (1871), 596 ; (1881), 752 ; (1891), 841 ; *Population enumerated* (1871), 2,714 ; (1881), 3,329 ; (1891), 3,866 ; *Estimated* (1894), 4,000.

INSPECTION OF DISTRICT.—Systematic inspection of all parts of the district has been carried out during the past year, and the necessary steps taken for the abatement of nuisances found, a list of which will be seen in Table VI. Mr. A. Rodwell's services as Inspector of Nuisances terminated in October last, and the Skipton Rural Sanitary Authority wishing to retain the whole of his services in the future, gave notice to the Silsden Authority of their intention. The Board thereupon requested that he might be allowed to act for them until the end of the year, and this was arranged.

SANITARY CONDITION AND PROGRESS—WATER SUPPLY.—The town possesses a constant and plentiful supply of water. This is supplied by gravitation from the Board's own reservoirs. Their storage capacity is small, but when the necessity arises the Authority can draw from the works of the Bradford Corporation. In outlying parts beyond the service the inhabitants obtain their supply from private wells and springs, and water is in a few instances piped into the houses. No shortness of supply has been experienced during the past year. An extension consisting of 40 yards of 3-inch, and 40 yards of 2-inch pipes with 2 hydrants was laid in Skipton Road.

SEWERAGE AND DRAINAGE.—There is no proper system of sewerage and drainage for the town. The sewage passes for the most part into the rubble highway drains which discharge into the Silsden Beck, a tributary of the Aire. The private drainage of all the older property is also constructed of rubble, and many of the house drains discharge directly into the stream. In all dwellings of recent erection the drains are laid in sanitary pipes, and disconnected. The condition of the Beck, which flows through the town and receives the mill refuse, as well as the sewage, is very objectionable, and at times very offensive. Last year, in consequence of pressure brought to bear by the County Council, the Board instructed Mr. Charles Gott, M.I.C.E., of Bradford, to prepare plans for the proper sewerage of the town.

The completed plans and estimates were presented to the Board, on November 9th last. The application was to be made to the Local Government Board at the commencement of the present year for sanction to borrow £10,646 for carrying out these works. A provisional purchase of 12 acres, 2 roods, and 7 perches of land from Lord Hothfield, for sewage disposal, has been arranged, at £100 per acre, and the present tenant has agreed to accept the sum of £387 : 10 : 0 to give up his lease.

It is proposed to deal with the sewage by settling tanks and irrigation. A portion of land to be acquired is in the Keighley Rural District, but for this it is proposed to effect an exchange.

EXCREMENT AND REFUSE DISPOSAL.—Great improvement has taken place during late years in the method of excrement disposal. The privies in the town used to belong chiefly to the old fashioned uncovered midden type. These are being gradually converted into privies with moveable receptacles. All those of recent erection are constructed on plans in accordance with the principles advocated in the model bye-laws. In outlying parts of the district the privies are either of the uncovered midden type, or what are known as block privies. Since the year 1887 the Board has undertaken by contract the removal of nightsoil and ashpit refuse, and the work has on the whole been well done. In April last, the Board decided itself to undertake the work, and purchased two scavenging carts and a horse for the purpose, at a cost of £66. The work is done in the day time.

BYE-LAWS AND REGULATIONS.—The Board possesses bye-laws with respect to “Slaughter-houses” and “Common Lodging-houses,” which were allowed in 1884, and with respect to “New Streets and Buildings,” allowed in 1885. They are, with a few modifications, closely assimilated to the “Model Bye-laws” of the Local Government Board. A series of Regulations under the Dairies, Cowsheds, and Milkshops’ Order, 1886, has been adopted.

ACTS OF PARLIAMENT ADOPTED.—The “Infectious Diseases (Notification) Act, 1889,” was adopted last year and came into operation on January 27th, 1894. Part III of the “Public Health Acts (Amendment) Act, 1890,” was adopted in April of this year.

INFECTIOUS HOSPITAL.—The Authority has no means available for the isolation of cases of infectious disease, nor for the stoving and disinfection of bedding, &c. An offer previously made by the Skipton Rural Sanitary Authority to join with them in the provision of a joint hospital was declined. Last year I reported upon a suggested site for a permanent hospital for Silsden, but no further action has been taken in this direction. This year the Board approached the Skipton and Keighley Authorities with a view to a combination, but the suggestion was not entertained.

NEW OFFICES.—Plans for these, prepared at the end of last year, have remained in abeyance, and an application for a loan for the erection of the buildings will shortly be made to the Local Government Board.

POPULATION.—At the census of 1871 the population was 2,714 living in 596 houses, and that of 1881 was 3,329 living in 752 houses. At the census of 1891 it was found to be 3,866 living in 841 houses. I have estimated it up to the middle of 1894 to be 4,000 living in 1,030 houses, or an average of 3·8 per house.

BIRTHS.—The total births registered were 99 in number (52 males and 47 females). This is a reduction of 15 from last year, and is equivalent to a birth rate of 24·7 per 1,000 as compared with 28·8 last year, and 31·0 in 1892. The natural increase to the population was 39.

DEATHS.—The total deaths returned were 60 in number (36 males and 24 females). This is a reduction of 18 upon last year, and is equivalent to an annual death rate of 15·0 per thousand living, as compared with 19·7 last year, and 18·7 in 1892.

The deaths occurred in each quarter as follows:—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
1884	12	12	15	11
1885	25	17	16	14
1886	17	6	17	21
1887	15	10	22	15
1888	22	13	20	17
1889	15	16	19	23
1890	20	15	7	19
1891	16	42	9	15
1892	14	35	11	12
1893	18	18	21	21
1894	13	18	14	15

The mortality as to age was as follows:—

Deaths under 1 year of age	11	} 19 under 5 years of age.
„ over 1 year and under 5	8	
„ „ 5 „ 15	3	} 41 over 5 years of age.
„ „ 15 „ 25	4	
„ „ 25 „ 60	11	
„ „ 60	23	
Total..60		

TABLE I.

Table showing population, inhabited houses, births, and deaths for the last eleven years 1884-94 inclusive, and also the average of the decade, 1878-87:—

Year.	Population.	Inhabited Houses.	Births.	Deaths.*
1884	3560	835	113	50
1885	3630	786	95	72
1886	3700	840	117	62
1887	3770	840	105	64
Average of 10 years 1878-87.	3457	..	110	67
1888	3860	840	111	75
1889	3940	840	118	73
1890	4020	874	122	62
1891	3866	841	120	83
1892	3900	890	121	73
1893	3950	950	114	78
1894	4000	1030	99	60

* Including deaths of persons belonging to District who died in the Skipton Workhouse.

TABLE II.

Table showing the average annual birth rate, rates of mortality, death rates among children, and deaths in public institutions, for the ten years 1878-87, and in the last eleven years.

Year.	Birth rate per 1,000 of the Population.	Annual rate of mortality per 1,000 living.	Deaths of Children under 1 year; percentage of total deaths.	Percentage of deaths of Children under 1 year to registered births.	Deaths of Children under 5 years; percentage of total deaths.	Total number of deaths in Public Institutions.
1884	31.7	14.0	24.0	10.6	32.0	2
1885	26.1	20.1	15.0	11.5	20.5	1
1886	31.6	16.7	19.3	10.2	33.8	1
1887	27.8	16.9	20.3	12.3	42.1	2
Mean for Decade 1878-87	32.0	19.5	20.2	12.3	33.8	1.3
1888	28.7	19.4	13.3	9.0	26.6	3
1889	29.9	18.5	24.6	15.2	36.9	0
1890	30.3	15.4	20.9	10.6	30.6	1
1891	31.0	21.4	25.3	17.5	37.3	1
1892	31.0	18.7	31.5	19.0	43.8	1
1893	28.8	19.7	20.5	14.0	26.9	0
1894	24.7	15.0	18.3	11.1	31.6	0

The birth rate is 4.1 below that of last year and is the lowest upon record for the district. The general death rate is the lowest recorded with one exception that of 1884 (14.0), and is 4.5 below the mean for the decade 1878-87, and 3.8 below that for the six last years. The infant mortality is lower than it has been since 1888 and is 1.2 below the mean for the ten years 1878-87. The percentages to total deaths of deaths of children under one and under five years, are also below the average. Among persons aged sixty and upwards there were 23 deaths, or a percentage to total deaths of 38.3.

MEAN AGE AT DEATH.—The mean age at death this year was 38.2 (36.5 for males and 40.7 for females), as compared with 44.2 last year, and 27.3 in 1892.

TABLE III.

Table showing number of deaths certified by registered medical practitioners, uncertified deaths, and inquests, with their percentage to total deaths, during the years 1892, 1893, and 1894.

	Deaths.			Percentage of Total Deaths.		
	1892	1893	1894	1892	1893	1894
Certified	66	74	55	91.6	94.8	91.6
Uncertified	3	4	3	4.1	5.1	5.0
Inquests	3	..	2	4.1	..	3.3

UNCERTIFIED DEATHS IN 1894.

Locality.	Sex.	Age.	Cause Assigned.
Kirkgate	F	3	Not known
North Street.....	M	13 hours.	Convulsions
Town Head	M	85	Old Age Syncope

TABLE IV.

Table showing the mortality from certain classes of diseases, and proportions to population and to 1,000 deaths, in the years 1892, 1893, and 1894.

	Total deaths.			Deaths per 1,000 of Population.			Proportion of deaths to 1,000 deaths.		
	1892	1893	1894	1892	1893	1894	1892	1893	1894
1. Seven Principal Zymotic Diseases ..	14	10	3	3·3	2·5	0·7	194	123	50·0
2. Pulmonary Diseases (other than Phthisis)	12	14	17	3·0	3·5	4·2	161	179	283
3. Tubercular Diseases	6	7	4	1·5	1·7	1·0	83·3	89·7	66·6
4. Wasting Diseases of Infants.....	2	2	1	0·5	0·5	0·2	27·7	25·6	16·6
5. Convulsive Diseases of Infants	9	4	2	2·3	1·0	0·5	125	51·2	33·3

NOTES.

1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, and Diarrhœa.

3. Includes Phthisis, Scrofula, Rickets, and Tabes.

4. Includes Marasmus, Atrophy, Debility, Want of Breast-milk, and Premature Birth.

5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

The only class in which there is an increase this year in the number of deaths is that of Pulmonary Diseases. In all the other classes there is a satisfactory decrease.

TABLE V.

Table showing the number of deaths from the seven principal Zymotic Diseases in the years 1892, 1893, and 1894.

Disease.	Total Deaths.			Proportion of deaths to 1,000 deaths.		
	1892	1893	1894	1892	1893	1894
Smallpox .....	..	..	..	..	..	..
Measles	1	2	..	13·8	25·6	..
Scarlet Fever .....	..	..	..	..	..	..
Diphtheria and Mem- branous Croup }	4	Mem. Croup. 2	..	55·5	25·6	..
Whooping Cough	8	..	1	111·1	..	16·6
Fever	1	1	2	13·8	12·8	33·3
Diarrhœa .....	..	5	..	..	64·1	..

Only three deaths were returned under the head of Zymotic disease as against 10 last year and 14 in 1892. This is equivalent to a Zymotic rate of 0·7 per 1,000 living. 18 certificates were received under the Infectious Diseases (Notification) Act, 1889.

SCARLATINA.—Six isolated cases of Scarlatina were notified during the year. Of these, one occurred in May, two in September, and three in December. In the absence of a hospital these cases had to be dealt with at their own homes. Precautions were given and disinfectants supplied in each case. The disease was mild in type, and it is fortunate that it did not spread further.

WHOOPING COUGH.—One death was returned from Whooping Cough in a child of four months in December.

TYPHOID FEVER.—Two deaths were registered as due to Typhoid Fever. In all, six cases were reported. The first occurred in April in a man aged 40, living in Wesley Place. The house was a new one and its drainage arrangements were satisfactory, but great complaints were made of the nuisance arising from a liquid manure tank on adjoining property which in wet weather was apt to overflow on the surface. A Board's notice was served to abate this. Another case reported in April was that of a child aged two years, in Bolton Road. This case appeared to be of a very doubtful nature. In June a case occurred in Keighley Road, that of a boy aged 12. This case was severe in type and terminated fatally. At this house the pipe from the slopstone was connected directly with the drain and untrapped, and this was remedied. A second case occurred in this house in a boy of 14, who recovered. The two remaining cases were those of a boy aged six, in Southview Terrace in July, and a boy of nine years of age, in Mitchell Square in September. The first of these was a mild case and made a good recovery, and nothing insanitary was found on the premises. The latter case was severe in type, and ended fatally. Here again the slopstone pipe was directly connected with the drain which was of rubble, and smelt badly.

ERYSIPELAS.—Six cases of Erysipelas were notified throughout the year. Of these, two occurred in February and one each in March, September, October, and November. Three were males and three females, and all were over five years of age.

INFLUENZA.—A single death was registered as due to “Influenza and Convulsions” in a child three years of age.

TABLE VI.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c., completed in the year ending December 31st, 1894:—

House Drains trapped and ventilated.....	3
Pail Closets provided	35
Water Supply, Houses provided with	34
Ashpits, new provided.....	36
Ashpits repaired, covered, &c.	5
No. of Ashpits ordered to be emptied	166
Removal of accumulation of dung, stagnant water, animal and other refuse	5
Filthy Houses ordered to be cleansed	1
Eaves troughs provided	1
Slaughter houses inspected	6
Dairies and cowsheds inspected	6
Canal boats inspected	18

ASCOUGH RODWELL (Assoc. San. Inst.), Certificated Inspector of Nuisances.

SLAUGHTER HOUSES, &c.—These have been regularly inspected and are fairly well kept. There is no *common lodging house* in the district. There are no *noxious trades*. No instance of *overcrowding* has been reported, and no *unsound meat* has to my knowledge been exposed for sale. *Legal proceedings* have not been resorted to.

18 CANAL BOATS were examined by Mr. Munro, the Inspector under the Act, and were found in a satisfactory condition.

The matters requiring the attention of the Authority are:—

1. To carry out an efficient scheme for the proper sewerage of the town. This will necessarily include the efficient ventilation of public and private drains, the thorough disconnection of house drains from sewers, and the proper disposal of the sewage at the outfall.
2. The adoption of Part III of the “Public Health Acts Amendment Act, 1890.”
3. The provisions of (a) a hospital for the isolation of cases of infectious disease, together with (b) efficient stoving apparatus for the disinfection of clothing, bedding, &c., and (c) an ambulance for the proper removal of cases.

FRANCIS E. ATKINSON, L.R.C.P. (London), M.R.C.S.,
Medical Officer of Health.

The Silsden Urban District Council,

February, 1895.

TABLE OF DEATHS during the Fourteen Years 1881-94, in the Urban Sanitary District of Silsden classified according to Diseases and Ages, and showing also the Population of the District, and the Births therein during each year.

NAME OF LOCALITY adopted for the purpose of these Statistics; public institutions being excluded.	POPULATION AT ALL AGES.			MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS IN PERSONS UNDER FIVE YEARS OF AGE.																							
	Census.	Estimated to middle of Year.	Registered Births.	At all Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 60.	60 and upwards.	12	Smallpox.				Measles.	Scarlatina.	Diphtheria.	Group not "spasmodic."	Whooping Cough.	Continued Fevers.			Cholera.	Rhumatic Fever.	Drysipelas.	Pyæmia.	Pæripetal Fever.	Ague.	Phtthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	Other Diseases.
												13	14	15	16						17	18	19											
1	2	3	4	5	6	7	8	9	10	11	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
SILSDEN	1881	3329	116	69	9	15	10	4	15	16	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1882		107	67	14	4	4	10	25	10	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1883		121	66	12	9	3	6	15	21	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1884		113	48	12	4	...	2	21	9	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1885		95	72	11	4	1	6	21	29	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1886		117	61	12	9	4	3	16	17	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1887		105	62	13	14	2	4	14	15	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1888		111	72	10	10	7	6	15	24	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1889		118	73	18	9	3	4	16	23	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1890		122	61	13	6	3	3	12	24	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1891	3866	120	82	21	10	3	5	17	26	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1892		121	72	23	9	3	2	21	14	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1893		114	78	16	5	1	2	17	37	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
"	1894		99	60	11	8	3	4	11	23	Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
TABLE B. ....1894											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
											Under 5.....	13	14	15	16	17	18	19	20	21	22	23												

SILSDEN

URBAN DISTRICT COUNCIL.

Annual Report

OF THE

MEDICAL OFFICER OF HEALTH

FOR

1894.

Craven Printing and Stationery Co., Limited, Settle.

OAKWORTH URBAN DISTRICT COUNCIL.

Annual Report of the Medical Officer of Health
for the Year 1894.

Area, 11,905 acres ; *Rateable Value* (1894), £20,506 ; *Inhabited Houses* (1871), 1,284 ; (1881), 1,337 ; (1891), 1,373 ; *Population enumerated* (1871), 5,683 ; (1881), 5,769 ; (1891), 5,870 ; (*Estimated* 1894), 5,900.

INSPECTION OF DISTRICT.—This district has been regularly inspected during the past year, and special visits have been made in connection with outbreaks of infectious disease. Continuous progress is made in the abatement of all forms of nuisance, and in the reconstruction and conversion of old privies, as will be seen in Table VI.

SANITARY CONDITION AND PROGRESS—WATER SUPPLY.—The sources of water supply in this scattered District are various. At Oakworth, Lane Ends, and Utley, most of the houses have the Keighley supply laid into them. At Stanbury the water is also piped into the majority of the houses from a spring by the owner of the property. In the hamlets of Braithwaite, Laycock, Goose-Eye, Oldfield, Newsholme, Damems, Fell Lane, Brackenbank, Long Lee, and Thwaites, the water supply has for the most part to be fetched by the inhabitants from springs and shallow wells at various distances, and in a few cases it is laid into the houses. No extension of public mains has been laid this year. At Water Sheddles Reservoir the polarite filters have been completed, and great satisfaction has been expressed on the improvement effected thereby in the quality and appearance of the water supplied in Oakworth.

SEWERAGE AND DRAINAGE.—Oakworth and High and Low Utley are the only places in the district which have been provided with proper means of sewerage. In the latter place they have been completed. Further extensions have been made this year in connection with the Oakworth scheme, consisting of lengths of 9-inch sewer, from Staymaker Lane to Miss Cockshott's house, 55 yards ; Ran Lear Bottom, 68 yards ; Low Bank, 84 yards ; School Street, 67 yards ; opposite Victoria Terrace, 52 yards ; and Chip Hill, 82 yards ; and the house-connections have been made therewith. In other portions of the district the rubble highway drains are in most cases made to act as sewers. The private drainage is also for the most part of rubble, except in houses of recent erection, where the drains are laid in sanitary pipes, and are properly disconnected. In many of the older houses there are no slopstones provided, but grates outside the houses are used.

EXCREMENT AND REFUSE DISPOSAL.—The chief method of excrement disposal in use is the common privy-midden. Many of the older ones are uncovered, and of large size, but these are gradually being altered. Those of recent erection are constructed upon approved principles. At Utley, where the removal of nightsoil and ashpit refuse is under-

taken by contract, they are mostly provided with moveable receptacles. The work here has been well done, and the contract was re-let for £38. Last year the Board undertook the scavenging of Oakworth by contract, and this was re-let in September last to Mr. WM. SUGDEN for £90. Since the introduction of the sewerage scheme at Oakworth a large number of DUCKETT'S Waste Water Closets have been put in, and 30 additional ones have been constructed this year. In other parts the scavenging is mostly dependent upon the tenants, and in a few cases is undertaken by the larger property owners.

BYELAWS, &c.—The bye-laws previously in force in this District, which were sanctioned in 1873, were repealed in 1889, and the Board adopted the model bye-laws, with certain modifications, with respect to “New Streets and Buildings,” “Slaughter-Houses,” “Common Lodging Houses,” the “Cleansing of Earth Closets, Privies, Ashpits, &c.,” and “Cemetery.”

This Authority issued a series of Regulations under the “Dairies, Cowsheds, and Milkshops Order, 1886,” which came into force on May 1st, 1889.

ACTS OF PARLIAMENT ADOPTED.—The Infectious Diseases (Notification) Act, 1889, was adopted by this Authority, and came into force on the 1st of February, 1890. The Board in 1893 adopted Part III. of the Public Health Act (Amendment) Act, 1890.

INFECTIOUS HOSPITAL.—This Authority has no means for the proper isolation of cases of infectious disease, nor for the stoving and disinfection of infected bedding, clothing, &c. The Board should decide to combine with the Keighley and Bingley Authorities in their permanent scheme. This question was discussed, but the Authority unfortunately decided not to join. The matter should again be seriously considered, as this important provision cannot be more economically obtained than by combination.

POPULATION.—At the census of 1871 the population was 5,683, and that of 1881 was 5,769. The census of 1891 showed the population to be 5,870, living in 1373 houses. I have estimated it up to the middle of 1894 to be 5,900, living in 1,520 houses, or an average of 3·8 per house.

BIRTHS.—The total births registered were 148 in number (73 males and 75 females). This is one less than last year, and is equivalent to an annual birth-rate of 25·0 per 1000 living, as compared with 25·2 last year, and 26·1 in 1892. The natural increase to the population is 49.

DEATHS.—The total deaths returned were 99 in number (46 males and 53 females). This is a decrease of 6 from last year, and is equivalent to a death-rate of 16·7 per 1000 living, as compared with 17·8 last year, and 18·8 in 1892.

The deaths were distributed among the quarters of the year as follows :—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
1884	19	25	25	17
1885	40	34	27	19
1886	20	34	16	28
1887	36	22	33	20
1888	30	27	24	33
1889	21	21	19	31
1890	33	30	23	25
1891	30	42	23	24
1892	33	25	24	29
1893	34	23	24	24
1894	24	25	23	27

The mortality as to age was as follows :—

				Keighley Parish.	Stanbury.	
Deaths under	1 year of age	18	...	2	} 34 under 5 years of age.	
„ over	1 year and under 5...	13	...	1		
„	5 „	15...	9	—	} 65 over 5 years of age.	
„	15 „	25...	7	—		
„	25 „	60...	18	1		
„	60	26	...	4		
Total				99		

Tables A and B of the Mortality and Sickness in the Oakworth Urban Sanitary District for the twelve calendar months ending December 31st, 1894 :—

TABLE A.

NAME OF DISEASE.	Total Deaths registered in District.				Total.	
	Keighley Parish.		Stanbury.			
— 5 means under 5 years of age.....	—5	+5	—5	+5	—5	+5
+ 5 means over 5 years of age						
Smallpox .....	...	...	...	...	...	...
Measles .....	...	1	...	...	...	1
Scarlatina .....	...	...	...	...	...	...
Diphtheria .....	...	...	...	...	...	...
Croup (not “ spasmodic ”) .....	...	1	...	...	...	1
Whooping Cough.....	3	...	...	...	3	...
“ Continued ” Fevers.	Typhus .....		...	...	...	...
	Enteric or Typhoid .....		...	...	...	...
	Of other or doubtful .....		...	...	...	...
Diarrhoea and Dysentery.....	...	...	...	...	...	..
Cholera .....	...	...	...	...	...	...
Rheumatic Fever .....	...	...	...	...	...	...
Erysipelas .....	...	...	...	...	...	...
Pyæmia .....	...	...	...	...	...	...
Puerperal Fever .....	...	1	...	...	...	1
Ague .....	...	...	...	...	...	...
Influenza .....	...	...	...	...	...	...
Phthisis .....	...	10	...	...	...	10
Bronchitis, Pneumonia, and Pleurisy	13	3	2	1	15	4
Heart Disease	1	19	...	1	1	20
Injuries	1	1	...	...	1	1
Diseases not named above	13	24	1	3	14	27
Total	31	60	3	5	34	65

TABLE B.

NAME OF DISEASE.	New Cases of Sickness.			Institutions.
—5 means under 5 years of age	—5	+5	Total.	No Hospital or other Public Medical Institution in the District.
+5 means over 5 years of age				
Smallpox .....	...	...	...
Scarlatina	1	...	1	
Diphtheria	2	7	9	
Membranous Croup	2	1	3	
Fevers. { Typhus .....	...	...	...
Enteric or Typhoid .....	...	1	1
Continued .....	...	...	...
Relapsing .....	...	...	...
Puerperal .....	...	1	1
Cholera ...	...	...	...
Erysipelas .....	...	4	4
Total	5	14	19	

The following Tables, I. to IV., are uniform with those of previous years :—

TABLE I.

Table showing population, births and deaths for the years 1884-94 inclusive, together with average for period of ten years 1878-87:—

Year.	Population estimated to middle of the year.	Births.	Deaths.
1884	5,800	119	86
1885	5,810	125	120
1886	5,820	140	98
1887	5,830	166	111
Average for Decade, 1878-87.	5,821	151	106
1888	5,830	142	114
1889	5,840	139	92
1890	5,900	148	111
1891	CENSUS 5,870	151	119
1892	5,880	154	111
1893	5,890	149	105
1894	5,900	148	99

TABLE II.

Table showing the annual birth-rate, rates of mortality, death-rates among children, and deaths in public institutions, during the eleven years 1884-94 inclusive, and the average for the decade 1878-87 :—

Year.	Birth-rate per 1000 of the Population.	Annual Rate of mortality per 1000 living.	Deaths of Children under 1 year ; percentage of total deaths.	Percentage of deaths of Children under 1 year to registered births.	Deaths of Children under 5 years ; percentage of total deaths.	Deaths in Public Institutions.
1884	20·5	14·8	20·9	15·1	27·8	...
1885	21·5	20·6	16·6	16·0	27·5	...
1886	24·0	16·8	13·2	9·2	17·3	..
1887	28·4	19·0	25·2	16·8	36·0	...
Average for decade 1878-87	25·8	18·2	19·2	13·5	29·2	...
1888	24·3	19·5	14·0	11·2	28·0	...
1889	23·8	15·7	15·2	10·0	28·2	...
1890	25·0	18·8	18·9	14·1	25·2	..
1891	25·7	20·2	14·2	11·2	26·8	...
1892	26·1	18·8	21·6	15·5	36·0	...
1893	25·2	17·8	19·0	13·4	29·5	...
1894	25·0	16·7	20·2	13·5	34·3	...

The birth-rate is slightly below the average. The general death-rate is 1·5 below the mean for the decade 1878-87, and 1·7 below that for the past six years, and has only been lower in the years 1883, 1884, and 1889. The infant mortality is about the average, while the proportions of deaths of children under one and under five years to the total deaths are rather higher than usual. Among persons aged 60 and upwards there were 30 deaths, or a percentage to the total deaths of 30·3.

MEAN AGE AT DEATH.—The mean age at death this year was 33·2 (41·1 for males and 26·2 for females), as compared with 37·0 last year, and 36·0 in 1892.

TABLE III.

Table showing number of deaths certified by registered medical practitioners, uncertified deaths, and inquests, with their percentage to total deaths, during the years 1892, 1893, and 1894.

	Total Deaths.			Percentage of Total Deaths.		
	1892	1893	1894	1892	1893	1894
Certified	93	96	94	83·7	91·4	94·9
Uncertified	17	6	2	15·3	5·7	2·0
Inquests	1	3	3	0·9	2·8	3·0

UNCERTIFIED DEATHS IN 1894.

Locality.	Sex.	Age.	Cause Assigned.
High Utley	F	72	Diabetes
Damems	F	4 days.	Convulsions

The number of uncertified deaths is the smallest ever recorded.

TABLE IV.

Table showing the mortality from certain classes of diseases, and proportions to population and to 1000 deaths, in the years 1892, 1893, and 1894.

	Total Deaths.			Deaths per 1000 of Population.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894	1892	1893	1894
1. Seven Principal Zymotic Diseases ...	9	8	5	1.5	1.3	0.8	81.0	76.1	50.5
2. Pulmonary Diseases (other than Phthisis)	29	13	19	4.0	2.2	3.2	261	123	191
3. Tubercular Diseases	11	20	15	1.8	3.3	2.5	99.0	190	151
4. Wasting Diseases of Infants.....	9	7	6	1.5	1.1	1.0	81.0	66.6	60.6
5. Convulsive Diseases of Infants	7	11	6	1.1	1.8	1.0	63.0	104	60.6

NOTES.

1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, Diarrhœa, and Dysentery.

3. Includes Phthisis, Scrofula, Rickets, and Tabes.

4. Includes Marasmus, Atrophy, Debility, Want of Breast-milk, and Premature Birth.

5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

In the above classes of disease there has been a slight increase in the deaths due to Pulmonary Diseases, while there is a reduction in those from Tubercular Diseases, and also in Wasting and Convulsive Diseases of Infants.

TABLE V.

Table showing the number of deaths from the seven principal Zymotic Diseases in the three years 1892, 1893, and 1894.

Disease.	Deaths.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894
Smallpox .....	...	...	...	...	...	...
Measles	2	...	1	18·0	...	10·1
Scarlet Fever	2	3	...	18·0	28·5	...
Diphtheria.....	1	3	^{Croup} 1	9·0	28·5	10·1
Whooping Cough.....	2	...	3	18·0	...	30·3
Fever	1	1	...	9·0	9·5	...
Diarrhœa	1	1	...	9·0	9·5	...
TOTALS..	9	8	5	81·0	76·1	50·5

Five deaths were returned under the head of zymotic disease as compared with eight last year and nine in 1892. This is equivalent to a zymotic rate of 0·8 per 1000 living. Nineteen certificates were received during the year under the Infectious Diseases (Notification) Act, 1889, as compared with 76 last year.

MEASLES.—A single death was returned from Measles in a boy of 5 years at Laycock at the end of December.

SCARLATINA.—One case only was reported during the year. This occurred at Thwaites in March in a little girl of 3 years. The infection was probably imported from Keighley.

DIPHTHERIA.—The principal outbreak of the year was one of Diphtheria at Lane Ends, Oakworth. This consisted of six single cases. The first case was reported at the end of February, and the other five occurred during the month of March. They were children between the ages of 6 and 11 years, and all were pupils at the National School. They apparently contracted the infection at school from the first case, to the origin of which I could find no clue. Care was taken to exclude from school all children from the infected households, and as the disease did not spread any further, it was not necessary to close the school. The disease was mild in type, and although in each instance the child attacked was one of a large family, there was no further spread in the household.

Another case of Diphtheria was reported at Thwaites in June in a child of 2 years. Here there was no clue to its origin.

Two other cases were notified in December. The first of these occurred in a man of 29, living in Clough's Houses, Ingrow Lane, and the other in a little girl of 4, in North View Terrace, Thwaites. In neither instance was any insanitary condition found on the premises.

MEMBRANOUS CROUP.—Three cases were notified as Membranous Croup. Of these one occurred in an infant, at Newsholme, in January; another, an infant in Larkfield Terrace, Oakworth, in April; and one at Oldfield, in a girl of 5 years, in March. This last case terminated fatally. In no instance was there any clue to the origin of the disease.

WHOPING COUGH.—This disease was prevalent in Oakworth in March, and caused three deaths in young children.

TYPHOID FEVER.—A single case was reported, that of a girl aged 11 years, in Eelholm View Terrace, Utley. Nothing was found on examination of the premises to account for the outbreak.

ERYSIPELAS.—Four cases were notified, one each in April and October, and two in September. Of these one was a male and three females, and all adults.

PUERPERAL FEVER.—A death was returned from this cause in a woman of 31, in Low Utley, in November.

In Table VI. will be found a list of the various nuisances abated, and minor sanitary improvements effected during the year.

TABLE VI.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c., completed in the year ending December 31st, 1894.

Township.	Oakworth.	Stanbury.	Laycock.	Black Hill & Braithwaite	Utley.	Long Lee.	Ingrow.	Total.
No. of Complaints received	2	...	...	1	1	...	...	4
No. of Houses, Premises, &c., inspected	...	...	...	...	...	...	...	597
House Drains Repaired, Cleansed, &c. ...	8	5	1	1	4	...	...	19
House Drains Trapped and Ventilated ..	54	...	...	3	26	...	...	83
Privies and Water Closets, Repaired, Cleansed, &c.	6	2	...	2	3	1	...	14
Water Closets provided, Duckett's system	29	...	...	...	1	...	...	30
Pail Closets provided	6	...	...	...	...	1	...	7
Ashpits, new provided.....	2	...	...	...	2	1	...	5
Ashpits Repaired, Covered, &c.	3	...	...	...	...	...	...	3
No. of Ashpits ordered to be emptied ...	26	6	8	3	15	2	...	60
Removal of accumulation of Dung, Stagnant Water, Animal, and other Refuse	2	...	1	1	2	1	...	7
Removal of Animals improperly kept ...	1	...	...	...	...	...	...	1
Smoke Records taken	2	...	...	...	...	...	...	2
Houses Disinfected after Infectious Disease	6	...	...	...	...	1	1	8
Slaughter Houses Inspected	4	...	..	...	...	...	...	4
Bakehouses Inspected.....	3	...	...	...	...	..	...	3
Dairies and Cowsheds Inspected	63	8	...	7	6	4	2	90

JULIUS SPENCER, Certificated Inspector of Nuisances.

SLAUGHTER HOUSES, &c.—The *Slaughter Houses* and *Bakehouses* have been regularly inspected by the Inspector of Nuisances, and are fairly well kept. There is no *Common Lodging House* in the district. No instance of *overcrowding* was reported, nor to my knowledge was any *unsound meat* exposed for sale. There are no *noxious trades*. *Legal proceedings* have not been resorted to. The *Dairies and Cowsheds*, 90 in number, which are registered, have been inspected, and are fairly kept.

The matters requiring the attention of the Authority are :—

- 1.—The completion of the Oakworth sewerage scheme.
- 2.—The provision of proper means of sewerage and sewage disposal for the villages of Braithwaite, Laycock, and Stanbury.
- 3.—The adoption of the Public Health (Water) Act, 1878.
- 4.—To consider the undertaking by contract of the removal of nightsoil and ashpit refuse from other populous parts of the district.
- 5.—To join with the Keighley and Bingley Authorities in the provision of a permanent hospital for the proper isolation of cases of infectious disease, and in stoving apparatus for the proper disinfection of bedding, clothing, &c.

FRANCIS E. ATKINSON, L.R.C.P. (London), M.R.C.S.,
Medical Officer of Health.

To the Oakworth Urban District Council,
March, 1895.

OAKWORTH

URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1894.

HAWORTH

URBAN DISTRICT COUNCIL.

Annual Report of the Medical Officer of Health for the Year 1894.

Area, 1,873 acres ; Rateable Value (1894), £10,829 ; Inhabited Houses (1871), 656 ; (1881), 877 ; (1891), 1,099 ; Population enumerated (1871), 2,884 ; (1881), 3,816 ; (1891), 5,034 ; (Estimated 1894), 5,340.

INSPECTION OF DISTRICT.—This district has been regularly inspected during the past year, and special visits have been made in connection with outbreaks of infectious disease. Continuous progress is made in the abatement of all forms of nuisance, and in the reconstruction of old privies. The sanitary details of all new property are entered in the survey-book.

SANITARY CONDITION AND PROGRESS—WATER SUPPLY.—The town of Haworth is supplied from two reservoirs constructed in 1851 and 1880 respectively. Together they have a capacity of about 936,000 gallons. Water can be turned from either of these reservoirs into the mains, and in case of threatened shortness of supply, they can be supplied with the Keighley water by agreement. There has been a plentiful supply of water available throughout the year. No extension of water-mains has been laid.

SEWERAGE AND DRAINAGE.—The town of Haworth has no proper system of sewerage, the greater part of the main drainage consisting of rubble. The same applies in the older parts of the town to the private drainage. In the case of new streets and buildings the sewers and drains are laid in sanitary pipes, but the sewers are not provided with proper means of flushing, inspection, or ventilation. The sewage is for the most part discharged eventually into the River Worth, which in addition receives the refuse from the mills, and is always in a grossly polluted condition. The provision of a proper system of sewerage is much required, as in many instances it is found impossible to carry out proper disconnection of private drains, owing to the shallowness of the present rubble sewers.

Last year the Board asked Mr. W. B. WOODHEAD, of Bradford, to prepare a general report on the best means of providing the necessary sewerage for Haworth, and he suggested combination with Oakworth for sewage disposal at the outfall. No further steps have been taken this year, and the question has been delayed on account of a project to extend the district by the addition of Lees & Cross Roads, a portion of the Bingley Local Board's district, the sewage of which has been already dealt with on land just outside and below the Haworth boundary, and it is suggested that with additional land this will be the only available outfall for any Haworth sewerage scheme.

MEANS OF EXCREMENT AND REFUSE DISPOSAL.—The privy-midden is the form of excrement disposal chiefly in use. Many of the older ones have been re-constructed or moveable receptacles have been provided. The erection of new privies is subject to the requirements of the bye-laws in force. Since 1879 the Board has contracted for the

removal of night-soil and ashpit refuse, and the work has been fairly well done during the past year. A public tip for refuse is provided on the moor at West Lane end.

BYE-LAWS, &c.—The Board possesses a code of bye-laws with respect to “new streets and buildings” and “slaughter-houses,” which was incorporated in the “Haworth Local Board of Health Act, 1872.” These byelaws are, however, unsuited to the requirements of the present day. A committee was appointed to consider the whole question of their inadequacy and the possible adoption of a code in accordance with the models. It met, and the numerous points at variance were discussed at length. It was ascertained that before any revision of the byelaws could be effected, those embodied in the local Act would have to be repealed, but this could be done at a trifling expense. The Committee, however, recommended that the existing bye-laws should not be repealed. The Board adopted the model bye-laws with respect to “common lodging-houses,” and these were allowed on December 18th, 1890. Regulations under the “Dairies, Cow-sheds, and Milk-shops Order, 1886,” came into force in May, 1890.

ACTS OF PARLIAMENT ADOPTED.—The Infectious Diseases (Notification) Act, 1889, was adopted for this district, and came into force on February 1st, 1890. Part III. of the Public Health Acts (Amendment) Act, 1890, was adopted in 1892.

INFECTIOUS HOSPITAL.—This Authority possesses no means for the proper isolation of cases of infectious disease, nor for the stoving and disinfection of infected bedding, clothing, &c. The Board should combine with the Keighley and Bingley scheme for the provision of a joint permanent hospital, and appliances for disinfection.

BURIAL GROUNDS.—In December, DR. HOFFMAN, of the Home Office, inspected the Baptist Ground, Hall Green, in consequence of the reference made to its insanitary condition in my report of last year, and an Order in Council closing the ground (with certain exceptions) against further interments will be issued.

POPULATION.—At the census of 1871 the population was 2,884, living in 656 houses, and that of 1881 was 3,816, living in 877 houses. The census of 1891 showed the population to be 5,034, living in 1099 houses. I have estimated it up to the middle of 1894 to be 5,840, living in 1208 houses, or an average of 4·4 per house.

BIRTHS.—The total births registered were 97 in number (47 males and 50 females). This is a reduction of 13 upon last year, and is equivalent to an annual birth-rate of 18·1 per 1000, as compared with 21·0 last year, and 24·1 in 1892. The natural increase to the population is 16.

DEATHS.—The total deaths returned were 81 in number (28 males and 53 females). This is a decrease of 8 from last year, and is equivalent to a death-rate of 15·1 per 1000 living, as against 17·0 last year, and 19·6 in 1892.

The deaths occurred during each quarter as follows :

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
1884	26	22	12	28
1885	18	20	18	11
1886	15	20	18	16
1887	25	23	16	26
1888	30	19	14	16
1889	30	15	15	33
1890	29	21	18	29
1891	14	47	19	24
1892	22	23	21	34
1893	22	14	29	24
1894	26	26	14	15

Mortality as to age :—

Deaths under	1 year of age	17	} 26 under 5 years of age.
„ over	1 year and under 5	.....	9
„ „	5 „	15	3	} 55 over 5 years of age.
„ „	15 „	25	4	
„ „	25 „	60	21	
„ „	60	.....	27
Total			81	

Tables A and B of the Mortality and Sickness in the Haworth Urban Sanitary District for the twelve calendar months ending December 31st, 1894 :—

TABLE A.

NAME OF DISEASE.	Total Deaths registered in the District.		
	—5	+5	Total.
— 5 means under 5 years of age.....			
+ 5 means over 5 years of age			
Smallpox .....	...	...	...
Measles .....	...	...	...
Scarlatina .....	...	...	...
Diphtheria .....	...	...	...
Croup (not “ spasmodic ”) .....	...	...	...
Whooping Cough.....	...	...	...
“ Continued ” Fevers.	Typhus .....	...	...
	Enteric or Typhoid	1	1
	Of other or doubtful .....	...	...
Diarrhœa and Dysentery.....	...	...	...
Cholera .....	...	...	..
Rheumatic Fever .....	...	...	...
Erysipelas .....	...	...	...
Pyæmia .....	...	...	...
Puerperal Fever .....	...	...	...
Ague .....	...	...	...
Influenza .....	...	...	...
Phthisis .....	...	9	9
Bronchitis, Pneumonia, and Pleurisy	11	5	16
Heart Disease .....	...	9	9
Injuries .....	...	1	1
Diseases not named above	*15	30	45
Total	26	55	81

* This includes a death from “Hydrophobia” in a little girl of 2 years living in West Lane, who was bitten by a dog on July 2nd, and died on July 31st.

TABLE B.

CASES OF SICKNESS.					No Hospital or other Public Medical Institution in the District.
—5 means under 5 years of age		—5	+5	Total.	
+5 means over 5 years of age					
Smallpox .....	...	...	...
Scarlatina	3	8	11		
Diphtheria .....	...	...	...
Membranous Croup	3	...	3		
Feyers. {	Typhus .....	...	...	...
	Enteric or Typhoid .....	...	5	5
	Continued .....	...	3	3
	Relapsing .....	...	...	...
	Puerperal .....	...	...	...
Cholera .....	...	...	...
Erysipelas .....	...	9	9	
Totals.....		6	25	31	

TABLE I.

Table showing population, inhabited houses, births and deaths for the eleven years 1884-1894 inclusive.

Population estimated at the middle of the year.		Number of Inhabited Houses in the District.	Births.	Deaths.
1884	4180	930	106	88
1885	4300	940	92	67
1886	4400	950	110	69
1887	4400	936	109	90
1888	4400	1048	139	79
1889	4800	1090	113	95
1890	4940	1112	122	97
1891	Census 5034	1099	128	104
1892	5100	1112	123	100
1893	5220	1208	110	89
1894	5340	1208	97	81

TABLE II.

Table showing the annual birth-rate, rates of mortality, death-rates among children, and deaths in public institutions, during the eleven years 1884-94, inclusive, and the mean for the decade 1878-87 :—

Year.	Birth-rate per 1000 of the Population.	Annual Rate of mortality per 1000 living.	Deaths of Children under 1 year ; percentage of total deaths.	Percentage of deaths of Children under 1 year to registered births.	Deaths of Children under 5 years ; percentage of total deaths.	Total number of deaths in Public Institutions.
1884	25·3	21·0	19·5	16·0	30·6	...
1885	21·3	15·5	16·4	11·9	26·8	...
1886	25·0	15·6	14·4	9·0	28·9	..
1887	24·7	20·4	23·3	19·2	37·7	...
Mean for Decade 1878-87	27·5	18·4	19·7	13·6	33·1	...
1888	31·5	17·9	18·9	10·7	25·3	...
1889	23·5	19·3	25·8	21·2	35·4	...
1890	24·6	19·6	20·6	16·3	32·9	...
1891	25·4	20·6	20·1	16·4	26·9	...
1892	24·1	19·6	22·0	17·8	40·0	...
1893	21·0	17·0	22·4	18·1	32·5	...
1894	18·1	15·1	20·9	17·5	32·0	...

Both birth-rate and death-rate are the lowest ever recorded, the former being 9·4 below the mean for the decade 1878-87, and 6·9 below the mean for the past six years, while the death rate is 3·3 below the mean for the decade, and 3·9 below that for the past six years. The infant mortality, though rather lower than in the last two years, is above the average. The percentages to total deaths of deaths of children under one and under five years of age are about the average. Among persons aged 60 and upwards there were 27 deaths, or a percentage to total deaths of 33·3.

MEAN AGE AT DEATH.—The mean age at death this year was 35·8 (31·6 for males and 37·9 for females), as compared with 31·5 last year, and 29·6 in 1892.

TABLE III.

Table showing number of deaths certified by registered medical practitioners, uncertified deaths, and inquests, with their percentage to total deaths, during the years 1892, 1893, and 1894.

	Total Deaths.			Percentage of Total Deaths.		
	1892	1893	1894	1892	1893	1894
Certified	95	82	74	95·0	93·2	91·3
Uncertified	4	5	5	4·0	5·6	6·1
Inquests	1	2	2	1·0	2·2	2·4

UNCERTIFIED DEATHS IN 1894.

Locality.	Sex.	Age.	Cause Assigned.
Wood Street	M	54	Probably Bronchitis.
Well Street	F	6 mos.	Probably Convulsions.
Victoria Road.....	M	57	A Fit (probably due to exposure to the Sun).
Moor End	F	42	Heart Disease.
Dove Street.....	F	3 days.	Premature Birth, Convulsions.

TABLE IV.

Table showing the mortality from certain classes of diseases, and proportions to population and to 1000 deaths, in the years 1892, 1893, and 1894.

	Total Deaths.			Deaths per 1000 of Population.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894	1892	1893	1894
1. Seven Principal Zymotic Diseases ...	17	3	1	3·3	0·5	0·1	170	33·7	12·3
2. Pulmonary Diseases (other than Phthisis)	21	15	16	4·1	2·8	2·9	210	168	197
3. Tubercular Diseases	7	13	12	1·3	2·4	2·2	70·0	146	148
4. Wasting Diseases of Infants.....	8	3	6	1·5	0·5	1·1	80·0	33·7	74·0
5. Convulsive Diseases of Infants	7	11	5	1·3	2·1	0·9	70·0	123	61·7

NOTES.

1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, Diarrhœa, and Dysentery.

3. Includes Phthisis, Scrofula, Rickets, and Tabes.

4. Includes Marasmus, Atrophy, Debility, Want of Breast-milk, and Premature Birth.

5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

The deaths due to Pulmonary and Tubercular Diseases are practically the same in number as last year. Those from Wasting Diseases of Infants have increased, and from Convulsive Diseases have decreased this year.

TABLE V.

Table showing the number of deaths from the seven principal Zymotic Diseases in the years 1892, 1893, and 1894.

Disease.	Deaths.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894
Smallpox .....	...	...	...	...	...	...
Measles	13	...	...	130	...	...
Scarlet Fever	2	...	...	20·0	...	...
Diphtheria and Mem- branous Croup	1	...	...	10·0	...	...
Whooping Cough.....	..	...	...	...	...	...
Fever	1	2	1	10·0	22·4	12·3
Diarrhoea .....	...	1	...	...	11·2	...
TOTALS.....	17	3	1	170	33·7	12·3

Only one death was returned under Zymotic Disease, which is equivalent to a zymotic rate of 0·1 per 1000 living. Thirty-one certificates were received during the year under the Infectious Diseases (Notification) Act, 1889, as compared with 40 last year.

SCARLATINA.—Eleven cases were notified but no deaths occurred. There were three isolated cases in April, July, and October. In November five cases occurred in one house, and in December three cases in two houses. The cases had to be dealt with at their own houses, and disinfectants were supplied.

MEMBRANOUS CROUP.—Three cases were notified as Membranous Croup in young children. These occurred in April, July, and October. In one instance in Fife Street the slopstone pipe was found to be directly connected with the drain.

TYPHOID FEVER.—Five cases of Typhoid Fever were reported in four houses. The first was that of a man aged 26, in Dove Street, Brow. A sister, aged 16, who helped to nurse him, subsequently contracted the disease and died. There was no insanitary condition to be found on the premises. The next case occurred in April, in a boy of 15, living in Hird Street. Here the slopstone pipe was found directly connected with the drain, and this was altered. In August a single case occurred in Prince Street, in a boy of 16. Here also the slopstone pipe was connected. The last case reported in September was that of a boy of 6, living in North View Terrace, Mytholmes. There was no clue to its origin discoverable. All possible precautions were taken in each case.

CONTINUED FEVER.—Three cases were notified as “continued fever.” The first of these occurred in September in a young man of 20 in Victoria Road, and here an untrapped opening communicating with the drain was found, and remedied. The other two cases occurred at Sowdens, and Belle Isle, in October and December respectively, in young girls. No insanitary condition was found on the premises.

ERYSIPELAS.—During the year nine cases of erysipelas were reported. Of these, two were under and seven over five years of age, and all were females.

TABLE VI.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c., completed in the year ending December 31st, 1894.

No. of complaints received	4
No. of houses, premises, &c., inspected	428
House drains repaired, cleansed, &c.....	14
House drains trapped and ventilated.....	34
Privies and water closets, repaired, cleansed, &c.	4
Water closets, supplied with water	1
Water closets provided	2
Pail closets provided	5
Privies provided	12
Houses provided with water supply	8
Ashpits, new provided	11
No. of ashpits ordered to be emptied.....	26
Removal of accumulation of dung, stagnant water, animal and other refuse...	4
Removal of animals improperly kept.....	8
Filthy houses ordered to be cleansed.....	2
Smoke records taken	4
Total No. of Summonses, or other legal proceedings	1
Houses disinfected after infectious disease	12
Slaughter houses inspected.....	5
Bakehouses inspected	5
Dairies and cowsheds inspected.....	23

JULIUS SPENCER, Certificated Inspector of Nuisances.

SLAUGHTER HOUSES, &c.—The *Slaughter Houses* and *Bakehouses* have been regularly inspected, and have been fairly well kept. There is no *Common Lodging House* in the district. The *Dairies and Cowsheds*, 23 in number, which are duly registered, have been inspected, and are well kept. There are no *noxious trades* in the district. No instance of *overcrowding* has been reported, and no *unsound meat* has to my knowledge been exposed for sale. *Smoke observations* are taken by the Inspector of Nuisances. *Legal proceedings* were taken in one instance in November, against WILLIAM HOWKER, for re-building and converting a stable in Violet Street, Coldshaw, into a dwelling house, without submitting plans. As a previous conviction had been obtained for building the stable without submitting plans, and in contravention of the byelaws, the Magistrates inflicted a penalty of £3 and costs.

The following are the matters requiring the attention of the Authority :—

1.—As the provision of the district with sufficient sewers for its effectual drainage is a duty which is imposed on the Sanitary Authority, by the 15th section of the Public Health Act of 1875, and as by the Rivers Pollution Prevention Act of 1876, no sewage is allowed to run into any stream without the best possible means being used for its purification, the Authority should take the necessary steps to provide Haworth with proper means of sewerage. This will necessarily include the efficient ventilation of public and private drains, the thorough disconnection of house drains from sewers, and the proper disposal of the sewage at the outfall.

2.—On account of the inadequacy of the present bye-laws with respect to “ New Streets and Buildings ” and “ Slaughter Houses,” a revision of these should be undertaken by the Authority. In effecting such revision the Model Bye-laws of the Local Government Board should be consulted.

3.—The pollution of the streams by solid matter being absolutely prohibited by the 2nd section of the Rivers Pollution Prevention Act, 1876, and the Public Health Acts (Amendment) Act, 1890, steps should be taken under Section 47 of the Public Health Acts (Amendment) Act, 1890, to prevent such pollution in the future.

4.—With a view to preventing the spread of infectious disease in the district, the Sanitary Authority should provide, in combination with the Keighley and Bingley Authorities (*a*) some permanent means for the immediate isolation of persons suffering from infectious disease, and who cannot be properly lodged and accommodated in their own homes ; and (*b*) some apparatus for the efficient disinfection of bedding, clothing, &c.

FRANCIS E. ATKINSON, L.R.C.P. (London), M.R.C.S.,
Medical Officer of Health.

To the Haworth Urban District Council,
February, 1895.

H A W O R T H

URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1894.

Printed at the "Craven Herald" Works, Skipton.

OXENHOPE URBAN DISTRICT COUNCIL.

Annual Report of the Medical Officer of Health for the Year 1894.

Area, 4,087 acres; *Rateable Value* (1894), £7,830; *Inhabited Houses* (1871), 524; (1881), 567; (1891), 588; *Population enumerated* (1871), 2,324; (1881), 2,442; (1891), 2,475; *Estimated* (1894), 2,490.

Inspection of District.—This District has been subject to routine inspection during the past year, and progress has been made in minor improvements, and in the abatement of ordinary nuisances, as will be seen in Table VI.

Sanitary Condition and Progress.—*Water Supply.*—In this thinly populated District the houses are chiefly supplied by shallow wells, springs, and pumps, from which water has to be fetched. Many groups of houses, however, in the more populous parts have water laid into them from springs and cisterns by the owners of property. The Authority has not yet adopted the Public Health (Water) Act, 1878, which might be found useful. No new works of water supply have been constructed this year.

Sewerage and Drainage.—No part of the District is as yet provided with a proper system of sewerage. The drainage of all older buildings consists of rubble, except where alterations have been enforced in consequence of nuisances arising, in which case they have been replaced by proper sanitary pipes. In all buildings of recent erection, the drains are laid in sanitary pipes. These, however, discharge into the highway drains and into the stream. Plans were prepared last year by Messrs. B. Hopkinson & Co., for the proper sewerage and sewage disposal of the more populous parts of the District, but owing to the difficulty of acquiring the required land for sewage disposal purposes the scheme has not yet been submitted to the Local Government Board.

A committee appointed this year to view different methods of sewage treatment, visited Baildon, Swinton, near Manchester, and Guiseley, as well as Oakworth. The Oakworth Authority was asked if it would undertake to deal with the Oxenhope sewage, but this was considered impracticable. Experiments have been made dealing with the effluent from sud tanks, the refuse of wool washing, after the extraction of the “magma,” by precipitating the solids by means of “alumino ferric,” and subsequently passing it (the effluent) through a “polarite” filter. The result was a perfectly clear effluent, in which no secondary decomposition took place.

Excrement and Refuse Disposal.—Excrement disposal is chiefly effected by means of the common privy-midden, and many of these are uncovered. Steady improvement is being made, however, in the conversion of the older privies into some form of moveable receptacle, so as to facilitate scavenging operations. Last year the Authority undertook the removal of night-soil and ashpit refuse for Uppertown, Lowertown, Shaw, Leeming, and Higher and Lower Marsh, but in March last it decided to let the scavenging by contract, and the work has been undertaken by Archibald Hartley and Joseph Greenwood for one year.

Bye-laws, &c.—The Board possesses Bye-laws with respect to “Common Lodging Houses,” allowed in 1872. The model bye-laws with respect to “Slaughter Houses” and “Cemetery” were allowed in 1885 and 1886, and with respect to “New Streets and Buildings” in 1893. A series of Regulations under the “Dairies, Cowsheds, and Milkshops Order, 1886,” came into force in May, 1889.

Acts of Parliament Adopted.—Part III. of the “Public Health Acts (Amendment) Act, 1890,” was adopted in 1892, and the “Infectious Diseases (Notification) Act, 1889” was adopted, and came into operation on April 1st, 1893.

Infectious Hospital.—At the beginning of the year this Authority passed a resolution expressing its willingness to join with the Keighley and Bingley Joint Hospital Board, for the erection of the Joint Permanent Hospital at Morton Banks, and two cases of small-pox were on this condition permitted to be removed to the temporary hospital there. As this Authority withdrew from the original combination for the Joint Hospital Board, a fresh Order will be required to embody it, and it is to be hoped that the other Worth Valley Authorities will by that time see the advisability of joining.

Population.—At the census of 1871 the population was 2,324, and that of 1881 was 2,442. At the 1891 census it was found to be 2,476, living in 588 houses. I have estimated it up to the middle of 1894 to be 2,490, living in 620 houses, or an average of 4.0 per house.

Births.—The total births registered were 55 in number (26 males and 29 females). This is a decrease of one upon last year, and is equivalent to an annual birth-rate of 22.0 per 1000, as against 22.5 last year, and 31.4 in 1892. The natural increase to the population is 14.

Deaths.—The total deaths returned were 41 in number (24 males and 17 females). This is a decrease of 3 from last year, and is equivalent to a death-rate of 16.4 per 1000 living, as compared with 17.7 last year, and 14.9 in 1892.

The deaths occurring in each quarter during the past eleven years were as follows:—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
1884	6	5	12	11
1885	7	15	9	16
1886	6	8	14	7
1887	11	15	16	12
1888	17	7	9	9
1889	17	14	11	9
1890	23	7	9	16
1891	16	19	9	4
1892	10	8	6	13
1893	10	12	9	13
1894	20	4	10	7

The mortality as to age was as follows:—

Deaths under	1 year of age.....	9	} 13 under 5 years of age.
„ over	1 year and under 5	4	
„ „	5 „ 15	1	} 28 over 5 years of age.
„ „	15 „ 24	—	
„ „	25 „ 60	7	
„ „	60.....	20	
Total		41	

Tables A and B of the Mortality and Sickness in the Oxenhope Urban Sanitary District for the twelve calendar months ending December 31st, 1894, are copied from my returns forwarded to the Local Government Board:—

TABLE A.

NAME OF DISEASE.	Total Deaths registered in District.		
	— 5	+ 5	Total.
— 5 means under 5 years of age	— 5	+ 5	Total.
+ 5 means over 5 years of age			
Smallpox .....	...	...	...
Measles .....	...	...	...
Scarlatina .....	...	...	...
Diphtheria .....	...	...	...
Croup (not “spasmodic”) .....	...	...	...
Whooping Cough	1	...	1
“Continued” Fevers.	Typhus .....	...	...
	Enteric or Typhoid ..	...	...
	Of other or doubtful sorts.....	...	...
Diarrhœa and Dysentery .....	...	1	1
Cholera .....	...	...	...
Rheumatic Fever .....	...	...	...
Erysipelas .....	...	...	...
Pyæmia .....	...	...	...
Puerperal Fever .....	...	...	...
Ague .....	...	...	...
Influenza .....	...	...	...
Phthisis .....	...	2	2
Bronchitis, Pneumonia, and Pleurisy	9	6	15
Heart Disease.....	...	5	5
Injuries .....	...	1	1
Diseases not named above	3	13	16
Total... ..	13	28	41

TABLE B.

NAME OF DISEASE.		New Cases of Sickness.			Institutions.
- 5 means under 5 years of age		- 5	+ 5	Total.	No Hospital or other Public Medical Institution in the District.
+ 5 means over 5 years of age					
Smallpox .....		..	2	2
Scarlatina .....		..	1	1
Diphtheria .....		..	..	..
Membranous Croup		1	..	1	
Fevers.	{ Typhus .....	..	..	..
	{ Enteric or Typhoid .....	..	2	2
	{ Continued .....	..	..	..
	{ Relapsing .....	..	..	..
	{ Puerperal .....	..	..	..
Cholera .....		..	..	..
Erysipelas .....		..	5	5
Total.....		1	10	11	

The following Tables, I. to V., are uniform with those of previous years :—

TABLE I.

Table showing population, inhabited houses, births and deaths for the years 1884 to 1894 inclusive :—

Population estimated at the middle of the year.		Number of Inhabited Houses in the District.	Births.	Deaths.
1884	2480	570	58	34
1885	2500	540	51	47
1886	2510	555	64	35
1887	2520	563	64	54
1888	2530	606	58	42
1889	2550	618	78	51
1890	2560	618	57	55
1891	2475	588	70	48
1892	2480	610	78	37
1893	2484	618	56	44
1894	2490	620	55	41

TABLE II.

Table showing the annual birth-rate, rates of mortality, death-rates among children, and deaths in public institutions, during the years 1884-94 inclusive, and the mean for the decade 1878-87:—

Year.	Birth-rate per 1000 of the Population.	Annual Rate of mortality per 1000 living.	Deaths of Children under 1 year; percentage of total deaths.	Percentage of deaths of Children under 1 year to registered births.	Deaths of Children under 5 years; percentage of total deaths.	Total number of deaths in Public Institutions.
1884	23·3	13·7	14·7	8·6	35·2	..
1885	20·4	18·8	10·6	9·8	25·5	..
1886	21·5	13·9	17·1	9·3	22·8	..
1887	25·3	21·4	12·9	10·9	33·3	..
Mean for decade 1878-87.	24·9	16·6	17·1	11·1	29·0	..
1888	22·9	16·6	19·0	13·7	21·4	..
1889	30·5	20·0	15·6	10·2	23·5	..
1890	22·2	21·4	14·5	14·0	29·0	..
1891	28·2	19·3	18·7	12·8	29·1	..
1892	31·4	14·9	18·9	8·9	43·2	..
1893	22·5	17·7	11·3	8·9	18·1	..
1894	22·0	16·4	21·9	16·3	31·7	..

The birth-rate is below the average, and has not been so low since 1886. The general death-rate is also slightly below the average. The infant mortality is, however, the highest upon record for any year except 1883, when it was 17·1. The percentages to total deaths of deaths of children under one and under five years of age are exceptionally high. Among persons aged 60 years and upwards, there were 20 deaths, or a percentage to the total deaths of 48·7.

Mean Age at Death.—The mean age at death this year is 39·5 (37·5 for males and 42·5 for females), as compared with 44·2 last year, and 33·5 in 1892.

TABLE III.

Table showing number of deaths certified by registered medical practitioners, uncertified deaths, and inquests, with their percentage to total deaths, during the years 1892, 1893, and 1894:—

	Total Deaths.			Percentage of Total Deaths.		
	1892.	1893.	1894.	1892.	1893.	1894.
Certified	33	43	39	89·1	97·7	95·1
Uncertified	4	1	1	10·8	2·2	2·4
Inquests .....	..	..	1	..	..	2·4

The one uncertified death was that of an infant a month old, who died of “convulsions.”

TABLE IV.

Table showing the mortality from certain classes of diseases, and proportions to population and to 1000 deaths, for 1892, 1893, and 1894.

	Total Deaths.			Deaths per 1000 of Population.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894	1892	1893	1894
1. Seven Principal Zymotic Diseases.....	3	1	2	1·2	0·4	0·8	81·0	22·7	48·7
2. Pulmonary Diseases (other than Phthisis)	10	10	15	4·0	4·0	6·0	270	227	365
3. Tubercular Diseases	3	11	2	1·2	4·4	0·8	81·0	25·0	48·7
4. Wasting Diseases of Infants	1	..	1	0·4	..	0·4	27·0	..	24·3
5. Convulsive Diseases of Infants	6	2	1	2·4	0·8	0·4	162	45·4	24·3

NOTES.

1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, Diarrhœa, and Dysentery.

3. Includes Phthisis, Scrofula, Rickets, and Tabes.

4. Includes Marasmus, Atrophy, Debility, Want of Breast-milk, and Premature Birth.

5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

It will be noticed that while there is a considerable increase in the number of deaths due to Pulmonary diseases, there is a great decrease in those from Tubercular diseases. Those from Wasting and Convulsive diseases of infants are much below the average.

TABLE V.

Table showing the number of deaths from the seven principal Zymotic Diseases during the three years 1892, 1893, and 1894:—

Disease.	Deaths.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894
Smallpox .....	..	..	..	..	..	..
Measles	2	..	..	54·0	..	..
Scarlet Fever .....	..	..	..	..	..	..
Diphtheria .....	..	..	..	..	..	..
Whooping Cough.....	1	..	1	27·0	..	24·3
Fever.....	..	..	..	..	..	..
Diarrhœa .....	..	1	1	..	22·7	24·3
Totals	3	1	2	81·0	22·7	48·7

Two deaths were returned under the head of zymotic disease. This is equivalent to a zymotic rate of 0·8 per 1000 living. Eleven certificates were received during the year under the Infectious Diseases (Notification) Act of 1889.

Smallpox.—At the beginning of January a case of small-pox was reported at West Row, Marsh. It was that of a man, aged 38, a wool-buyer, who was visiting Bradford every day, and there he must have contracted the disease. He began to feel ill on December 27th, and the eruption first appeared on December 30th. The case was notified on January 1st, and I made arrangements for his admission into the Keighley and Bingley Joint Temporary Hospital at Morton Banks, whither he was removed in the ambulance on the morning of the 3rd. The man had been vaccinated in infancy only, and had one mark only on his left arm. The other occupants of the house were his wife, vaccinated in infancy only, and three children, of 6 and 3 years and 9 months respectively. The two older children were sent away to an aunt's as soon as the eruption appeared. They had been successfully vaccinated in infancy. The baby had never been vaccinated owing to delicacy. This was immediately done, and the mother re-vaccinated. The infected clothing was sent to the disinfectant at the hospital. On February 5th a second outbreak occurred in a single woman, aged 43, sister-in-law of the first case. She had never been vaccinated. There was daily communication between this house and Bradford. She was moved at once to the Morton Banks hospital, and the other inmates of the household were re-vaccinated, and remained in quarantine for fourteen days. Both premises were disinfected, and no further cases occurred.

Scarlatina.—Only one case of scarlatina was notified during the year, being a girl, aged 8 years, at Manor Lands.

Membranous Croup.—A single case of membranous croup was reported in a young child. No insanitary condition was found on the premises.

Typhoid Fever.—Two cases were notified. The first occurred in March, and was that of a man aged 27, living at Moorhouse, Marsh. The other, that of a boy aged 11, took place in November at Bull Hill. At the house the slopstone drainage was found percolating down the house wall into the foundations, and immediate steps were taken to remedy this condition.

Whooping Cough.—A single death was returned from this cause in a child one month old at Lowertown in August.

Diarrhœa.—The death returned from diarrhœa occurred in a man of 68 at Cuckoo Park in September.

Erysipelas.—Five cases of erysipelas were reported during the year, in February, April, October, and November respectively. All were females and adults.

Slaughter Houses, &c.—The three *slaughter-houses* have been regularly inspected and are well kept. There is no *common lodging-house* in the District. No instance of *unsound meat* exposed for sale has come to my knowledge. There has been no case of *overcrowding* reported, and there are no *noxious trades*. The Cowsheds and Dairies, 25 in number, are duly registered and regularly inspected, and are fairly well kept. No *legal proceedings* have been undertaken. *Smoke observations* have been made by the Inspector, but no action was found necessary.

TABLE VI.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c.,

Completed in the year ending December 31st, 1894 :—

Number of Complaints received	2
„ Houses, Premises, &c., inspected	360
House Drains repaired, cleansed, &c.	4
„ trapped and ventilated	7
Privies and Water Closets repaired, cleansed, &c.....	7
Pail Closets provided	11
Privies provided	8
Ashpits, new provided	7
„ repaired, covered, &c.	6
Number or Ashpits ordered to be emptied	19
Removal of accumulation of dung, stagnant water, animal and other refuse....	1
„ animals improperly kept	1
Filthy Houses ordered to be cleansed	1
Smoke Records taken.....	2
Houses disinfected after infectious disease	4
Slaughter-houses inspected	3
Dairies and Cowsheds inspected	25

JULIUS SPENCER,

Certificated Inspector of Nuisances.

The matters requiring the attention of the Authority are :—

1. The adoption of the Public Health (Water) Act, 1878.
2. To carry out the proposed scheme for the proper sewerage of the more populous parts of the District.
3. To join with the Keighley and Bingley Authorities in the provision of a Permanent Hospital for the proper isolation of cases of infectious disease, and stoving apparatus for the proper disinfection of bedding, clothing, &c.

FRANCIS E. ATKINSON, L.R.C.P. (London), M.R.C.S.

Medical Officer of Health.

The Oxenhope Urban District Council,

February, 1895.

OXENHOPE

URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

1894.

BARNOLDSWICK URBAN DISTRICT COUNCIL.

Annual Report of the Medical Officer of Health
for the Year 1894.

Area, 2,129 acres; *Rateable Value* (1894), £9,774; *Inhabited Houses* (1871), 638; (1881), 820; (1891), 887; *Population enumerated* (1871), 3,187; (1881), 4,028; (1891), 4,131; (*Estimated* 1894), 4,160.

INSPECTION OF DISTRICT.—This district has been regularly inspected during the past year, and steps taken to abate nuisances found, as will be seen on reference to Table VI. Mr. FRANCIS LANCASTER has been successful in obtaining his certificate under the Sanitary Institute as Inspector of Nuisances.

SANITARY CONDITION AND PROGRESS—WATER SUPPLY.—Barnoldswick was supplied in 1891 with a plentiful and wholesome supply of water by means of a pumping scheme, and there has been no shortness experienced during the past year. A few short extensions of water mains have been laid in connection with new property, and 43 houses have been connected with the supply. The Board is contemplating the putting in of further fire hydrants in the town. The average daily consumption of water has been 15 gallons per head.

SEWERAGE AND DRAINAGE.—A Local Government Board Inquiry was held on March 1st, by WILLIAM J. BIRD CLERK, Esq., M.I.C.E., into an application for a loan of £8,000 to carry out the plans for the sewerage of the town, prepared by Messrs. BRIERLEY & HOLT, of Blackburn. After certain modifications in the scheme had been submitted to, consisting of an alteration in the outfall-sewer, and the use of the whole of the five acres of land for filtration purposes after the sewage is acted upon by the international process, sanction was received on June 21st. Since then the specifications have been got out, the contracts have been let, and a clerk of works appointed. Contracts Nos. 1 and 2, consisting of the laying of about 8000 yards of main sewers, and the preparation of the sewage disposal works, were let to Messrs. J. & M. HAWLEY, of Colne and Nelson. Contract No. 3 for pipes to Messrs. EDWD. BROOKE & SONS, of Huddersfield; and contract No. 4 for iron work to Mr. E. WOOLEY, of Accrington. Preparations for the commencement of the work have already been made, and it is to be hoped that the scheme will be satisfactorily completed during the present year.

EXCREMENT AND REFUSE DISPOSAL.—The majority of the privies in Barnoldswick used to be of the covered cesspit type, which are most objectionable. During recent years a large number of these have been replaced by moveable receptacles, and at the present time there are in the town 455 closets furnished with pails, 226 covered cesspools,

and three water closets. It is to be hoped that the completion of the new sewerage scheme will see the conversion of the covered cesspools into water closets. The ashpits, which are mostly dry ashpits, are as a rule uncovered; but all those of recent erection are properly covered. The removal of night-soil and ashpit refuse is undertaken by contract under the Board. The yearly contract was again let in February to Mr. DUCKETT for £142, and the work is fairly well done.

BYELAWS, &c.—The Board adopted the model byelaws with certain modifications with respect to “New Streets and Buildings,” “Slaughter Houses,” “Common Lodging Houses,” and “Nuisances,” and these were allowed by the Local Government Board on August 25th, 1891. It has also adopted a form of Regulations under the “Dairies, Cowsheds, and Milkshops Order, 1886,” and these were sealed on August 5th of the same year.

BARNOLDSWICK LOCAL BOARD (Gas) ACT, 1893.—An application was made in September for sanction to a loan of £1,500 for gas purposes, to be expended in extending gas mains in the town, and for cooking apparatus.

INFECTIOUS HOSPITAL.—Last year the Authority fitted up a shed at the Gas Works as a hospital for Smallpox. The cost incurred in altering the building amounted to about £60. Accommodation was provided for six beds in two wards, nurse's room, sleeping apartments for nurse, servant, and caretaker, kitchen and caretaker's room. There was plenty of room for extension in case of necessity. The building was heated by steam and lighted by gas, gas cooking stove and boiler for washing purposes being provided. It was again used this year for the isolation of two cases of Smallpox. This arrangement, however, can only be looked upon as a temporary provision.

ADOPTIVE ACTS OF PARLIAMENT.—The adoption of the Infectious Diseases (Notification) Act, 1889, and Part III. of the Public Health (Amendment) Act, 1890, was again discussed, but no action taken. This Authority is the only one in the Combined District which has not yet adopted the above Act. I have frequently pointed out the advantages of the Act, and would again remind you that the early information of the existence of infectious cases is the first step towards the prevention of the spread of the disease.

NEW OFFICES.—Early in the year the Board obtained the use of more commodious premises, situate over the Craven Bank, in Church-street.

POPULATION.—At the census of 1871 the population was 3,187, and that of 1881 was 4,028. At the 1891 census it was shown to be 4,131, living in 887 houses. I have estimated it up to the middle of 1894 to be 4,160 living in 1,035 houses, or an average of 4.0 per house.

BIRTHS.—The total births registered were 132 in number (59 males and 73 females). This is an increase of 3 upon last year, and is equivalent to an annual birth-rate of 31.7 per 1000 living, as compared with 31.0 last year, and 34.0 in 1892. The natural increase to the population is 56, as compared with 53 last year, and 65 in 1892.

DEATHS.—The total deaths returned were 71 in number (41 males and 30 females). To this must be added the deaths of five persons belonging to the district who died in the Skipton Workhouse. The number of deaths has been the same in the last three years, and is equivalent to an annual death-rate of 18.2 per 1000 living, as compared with 18.3 in each of the two previous years.

The deaths were distributed among the four quarters of the year as follows :—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
1891	9	23	13	18
1892	22	20	12	21
1893	19	11	17	27
1894	21	22	10	18

The mortality as to age was as follows :—

Deaths under 1 year of age	21	} 28 under 5 years of age.
„ over 1 year and under 5	7	
„ „ 5 „ 15	3	} 43 over 5 years of age.
„ „ 15 „ 25	2	
„ „ 25 „ 60	15	
„ „ 60	23	
Total		71

TABLE I.

Table showing population, inhabited houses, births, and deaths for the last eleven years 1884-94 inclusive, and also the average of the decade, 1881-90 :—

Year.	Population.	Inhabited Houses.	Births.	Deaths.
1884	4058		158	90
1885	4068		171	92
1886	4078		156	81
1887	4088		132	84
1888	4098		144	60*
1889	4109		140	64*
1890	4120		109	69*
Average for 10 years 1881-90.	4072		141	77
1891	Census. 4131	877	151	64*
1892	4140	900	141	76*
1893	4150	1000	129	76*
1894	4160	1035	132	76*

* Including deaths of persons belonging to this District, who died in the Skipton Workhouse.

TABLE II.

Table showing the annual birth-rate, rates of mortality, death-rates among children, and deaths in public institutions during the nine years 1884-93, and in the year 1894.

Year.	Birth-rate per 1000 of the Population.	Annual Rate of mortality per 1000 living.	Deaths of Children un- der 1 year ; percentage of total deaths.	Percentage of deaths of Children un- der 1 year to registered births.	Deaths of Children un- der 5 years ; percentage of total deaths.	Total number of deaths in Public Insti- tutions.
1884	38·9	22·1	37·7	21·5	51·1	...
1885	42·0	22·6	25·0	13·4	36·9	...
1886	38·2	19·8	19·7	10·2	43·2	..
1887	32·2	20·5	23·8	15·1	38·0	...
1888	35·1	13·8	31·5	12·5	42·1	3
1889	34·0	15·5	25·0	11·4	32·8	...
1890	26·4	16·2	28·3	17·4	39·2	2
Average for 10 years, 1881-90	34·7	18·9	26·7	14·9	41·8	...
1891	36·5	15·4	21·8	9·2	31·2	1
1892	34·0	18·3	21·0	11·3	31·5	1
1893	31·0	18·3	21·0	12·4	31·5	2
1894	31·7	18·2	28·9	16·6	38·1	5

The birth-rate, though a trifle above that of last year, is still 3·0 below the average. The general death-rate has been practically the same during the past three years, and is slightly below the average for the ten years 1881-90. The infant mortality shows a gradual increase during the last four years, and is above the average for the preceding decade. It has only been exceeded in the years 1890 and 1884. The percentage to total deaths of deaths of children under one year and under five years shews a considerable increase. Among persons aged 60 years and upwards there were 23 deaths, or a percentage to total deaths of 34·2.

MEAN AGE AT DEATH.—The mean age at death this year is 33·0 (28·8 for males and 38·3 for females), as compared with 35·1 (31·7 for males and 38·9 for females) last year.

TABLE III.

Table showing number of deaths certified by registered medical practitioners, un-certified deaths, and inquests, with their percentage to total deaths, during the years 1892, 1893, and 1894.

	Deaths.			Percentage of Total Deaths.		
	1892	1893	1894	1892	1893	1894
Certified	70	66	64	92·0	89·1	90·1
Uncertified	4	5	7	5·2	6·7	9·8
Inquests	2	3	...	2·6	4·0	...

UNCERTIFIED DEATHS IN 1894.

Locality.	Sex.	Age.	Cause Assigned.
North Avenue	F	12	Congestion of Lungs, Dropsy
Market Street	F	10 mos.	General Debility
East Hill Street	M	6 days.	Convulsions
Prospect	M	53	Apoplexy
Raikes	F	66	Syncope
Westgate Yard	F	4 days.	Convulsions
Garden Street.....	M	75	Old Age

There is a slight increase this year in the number of uncertified deaths.

TABLE IV.

Table showing the mortality from certain classes of diseases, and proportions to population and to 1000 deaths, in the years 1892, 1893, and 1894.

	Total Deaths.			Deaths per 1000 of Population.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894	1892	1893	1894
1. Seven Principal Zymotic Diseases ...	5	5	1	1.2	1.2	0.2	65.7	65.7	14.0
2. Pulmonary Diseases (other than Phthisis)	19	19	18	4.5	4.5	4.3	250	250	253
3. Tubercular Diseases	8	9	11	1.9	2.1	2.6	105	118	154
4. Wasting Diseases of Infants.....	3	6	7	0.7	1.4	1.6	39.4	78.8	98.5
5. Convulsive Diseases of Infants	7	6	9	1.6	1.4	2.1	92.1	78.8	126

NOTES.

1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, and Diarrhœa.

3. Includes Phthisis, Scrofula, Rickets, and Tabes.

4. Includes Marasmus, Atrophy, Debility, Want of Breast-milk, and Premature Birth.

5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

There is an increase this year in the deaths due to Tubercular Diseases, and those from Wasting and Convulsive Diseases of Infants.

TABLE V.

Table showing the number of deaths from the seven principal Zymotic Diseases in the three years 1892, 1893, and 1894.

Disease.	Total Deaths.			Proportion of deaths to 1000 deaths.		
	1892	1893	1894	1892	1893	1894
Smallpox .....	...	...	...	...	...	...
Measles .....	...	1	...	...	13·1	...
Scarlet Fever .....	...	...	1	...	...	14·0
Diphtheria.....	1	...	...	13·1	...	...
Croup .....	..	...	...	...	...	...
Whooping Cough.....	2	...	...	26·3	...	...
Fever	1	1	...	13·1	13·1	...
Diarrhœa	1	3	...	13·1	39·4	...
TOTALS..	5	5	1	65·7	65·7	14·0

Only one death was returned under the head of Zymotic Disease, which is equivalent to a zymotic rate of 0·2 per 1,000 living.

SMALLPOX.—A case of Smallpox was reported on April 18th. The man (ROBERT HACKING), aged 37, had the eruption well marked all over him, but chiefly on the face. He sickened on Sunday, the 15th, and the eruption made its first appearance on the 17th. He stated that he had been vaccinated in infancy, but there were no marks visible. He was a weaver, and worked at the Grove Shed at Earby, and had been lodging in the house (5, John Street) for five weeks. The house was occupied by WILLIAM RALPH, a hawker, aged 52, and his wife, aged 43, and five other men lodgers aged respectively 63, 50, 33, 32, and 28 years, all weavers working at various sheds in Barnoldswick. All of the occupants had been vaccinated in infancy only. I called a special meeting of the Board, and it was decided to remove the case as soon as possible to the Shed at the Gas Works, which was fitted up for the reception of Smallpox last year. A nurse and servant were wired for from Scarbro', and a caretaker engaged. The case was removed on the 19th in the ambulance hired from Skipton. The premises were disinfected, lime-washed, and cleansed, and the infected bedding and clothing removed and destroyed. Arrangements were made for the re-vaccination of the other inmates, who were kept in quarantine by the Board for 14 days. Exactly at the end of this period, one of the lodgers (ALFRED TAYLOR), aged 28, who had refused to be re-vaccinated, sickened, and he was removed to the Hospital on May 6th. The disinfection and cleansing of the premises, and the destruction of infected bedding was repeated, and the inmates placed in quarantine for a further period of 16 days. Both were severe cases, but made a good recovery. Bills were posted in the town urging vaccination and re-vaccination. I afterwards discovered that the infection was imported by the first case from Colne, where the man had slept one night in a house where subsequent cases occurred. In connection with this outbreak compensation was paid by the Sanitary Authority, under Section 121 of the Public Health Act, 1875, to the amount of £4 for bedding, &c., destroyed; and £23 3s. 6d. for quarantine expenses.

SCARLATINA.—A single death was registered from Scarlatina in a child of eight months in Rook Street in April. In all, 10 cases were notified. These were isolated outbreaks, and occurred throughout the year as follows: One each in January, March, April, September, and November; two in October; and three in two houses in December. Precautions were given, and disinfectants supplied in all cases.

SLAUGHTER HOUSES, COMMON LODGING HOUSES, &c.—The seven Slaughter houses and two Common Lodging-houses, which are duly registered, have been regularly inspected, and are fairly well kept. Two instances of *overcrowding* were reported in Common Lodging-houses. In both instances *legal proceedings* were taken against the occupiers, and a penalty was inflicted, with costs in each case. One of these (that of CHRISTOPHER GREEN, of 22, Westgate) was a second conviction. One case of a *filthy house* was reported, and the necessary notice was served, and the premises cleansed. There are no *noxious trades* in the district. No instance of *unsound meat* exposed for sale has come to my notice. The Dairies, Cowsheds, and Milkshops, which have been registered, have been duly inspected.

TABLE VI.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c., completed in the year ending 1894.

No. of complaints received	37
No. of houses, premises, &c., inspected	76
House drains repaired, cleansed, &c.....	18
Privies and water closets, repaired, cleansed, &c.	12
Pail closets provided	30
Houses provided with water supply	43
Ashpits, new provided	1
Ashpits repaired, covered, &c.	1
No. of ashpits ordered to be emptied.....	6
Removal of accumulation of dung, stagnant water, animal and other refuse...	4
Filthy houses ordered to be cleansed.....	1
Overcrowding	3
Total No. of Summonses, or other legal proceedings	4
Houses disinfected after infectious disease	1
Common lodging houses inspected	2
Slaughter houses inspected.....	7
Bakehouses inspected	2
Dairies and cowsheds inspected.....	10
Milkshops inspected	3
Premises examined under "Factory and Workshop Act"	1

FRANCIS LANCASTER, Certificated Inspector of Nuisances.

The matters requiring the attention of the Authority are :—

1. The provision, with as little delay as possible, of efficient means of sewerage and drainage. This will necessarily include the thorough ventilation of public and private drains, the complete disconnection of house drains from the sewers, and the proper disposal of the sewage at the outfall.
2. The pollution of the streams by solid matter being absolutely forbidden by the 2nd section of the Rivers Pollution Prevention Act, 1876, steps should be taken to prevent such pollution in the future.
3. The adoption of Part III. of the Public Health Acts (Amendment) Act, 1890.
4. The adoption of the Infectious Disease (Notification) Act, 1889.

FRANCIS E. ATKINSON, L.R.C.P. (London), M.R.C.S.,
Medical Officer of Health.

To the Barnoldswick Urban District Council,
February, 1895.

TABLE A.

TABLE OF DEATHS during the Fourteen Years 1881-94, in the Urban Sanitary District of Barnoldswick classified according to Diseases and Ages, and showing also the Population of the District, and the Births therein during each year.

1. NAME OF LOCALITY adopted for the purpose of these Statistics; deaths in public institutions of persons belonging to the District being included.	POPULATION AT ALL AGES.			MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.										MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS IN PERSONS UNDER FIVE YEARS OF AGE.																				
	Census, 1881.	Estimated to middle of Year.	Registered Births.	At all Ages.	Under 1 year.	5 and under 5.	15 and under 15.	25 and under 25.	60 and upwards.	MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS IN PERSONS UNDER FIVE YEARS OF AGE.																								
										Smallpox.	Measles.	Scarlatina.	Diphtheria.	Croup not "spasmodic."	Whooping Cough.	Continued Fevers.			Cholera.	Rheumatic Fever.	Erysipelas.	Pyæmia.	Puerperal Fever.	Ague.	Influenza.	Phtisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	Other Diseases.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
Barnoldswick	4028		142	74	22	9	6	6	11	20	Under 5 ..	..	..	..	2	..	1	..	..	1	..	..	..	2	..	..	..	..	..	4	..	..	20	
"		4038	115	93	29	12	6	10	21	15	Under 5 ..	..	..	..	..	..	2	..	1	..	..	..	2	..	..	..	..	..	..	6	10	5	1	16
"		4048	149	72	11	21	3	4	17	16	Under 5 ..	..	2	..	..	..	2	..	7	..	2	2	..	..	..	1	..	..	..	11	14	2	2	14
"		4058	158	90	34	12	5	11	19	9	Under 5 ..	..	1	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	8	..	..	1	33
"		4068	171	92	23	11	5	9	22	22	Under 5 ..	..	1	..	..	..	..	..	1	3	1	..	..	..	..	..	..	..	..	6	..	..	..	24
"		4078	156	81	16	19	1	10	23	12	Under 5 ..	..	3	4	..	..	1	2	..	2	..	..	..	..	..	..	..	..	..	5	..	..	2	16
"		4088	132	84	20	12	6	4	19	23	Under 5 ..	..	1	5	..	..	..	..	8	1	..	..	2	..	..	..	..	..	..	8	7	4	1	15
"		4098	144	60	18	6	2	4	15	15	Under 5 ..	..	..	1	2	..	..	..	3	..	1	..	..	..	..	..	..	..	..	5	..	..	1	14
"		4109	140	64	16	5	6	5	12	20	Under 5 ..	..	..	..	..	1	..	..	1	..	1	..	..	..	..	..	..	..	..	7	4	4	1	18
"		4120	109	69	19	6	3	10	14	17	Under 5 ..	..	..	..	..	1	..	..	1	3	..	..	..	..	..	..	..	..	..	7	7	9	1	17
"	Census 4131		151	64	14	6	5	2	13	24	Under 5 ..	..	1	..	..	1	..	..	1	1	1	..	..	..	..	..	..	1	..	5	..	..	..	13
"		4140	141	76	16	8	4	4	24	20	Under 5 ..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	..	..	1	..	8	..	..	2	20
"		4150	129	76	16	8	4	5	18	25	Under 5 ..	..	1	..	..	..	1	..	1	2	..	..	..	..	..	..	..	..	3	7	11	3	1	24
"		4160	132	76	22	7	3	2	16	26	Under 5 ..	..	1	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	9	..	..	..	19
TABLE B.				Under 5 ..	5 upwards	2	7	3	16	26	Under 5 ..	..	..	3	7	..	..	..	..	..	..	..	..	..	..	..	..	..	9	10	11	..	17	
											The cases of Smallpox were isolated in Hospital.																							

APPENDIX.

TABLE I.

Table showing Mean Mortality Rates for previous Decades :—

DATE.	Estimated Population.	Total Deaths from all Causes.	Death Rate from all Causes per 1000 living.	Deaths from Seven Principal Zymotic Diseases.	Zymotic Death Rate per 1000 living.	Deaths from "Fever."	Death Rate from "Fever" per 10,000 living.	Births.	Deaths under one year of age.	Death Rate under one year of age per 100 births.
Mean for ten years 1841-50	1888	32	16.9	5.3	2.8	2	10	65	9.3	14.3
Mean for ten years 1851-60	2302	57	24.8	9	4.0	1.3	5	85	14	17.1
Mean for ten years 1861-70	2975	68	22.8	12	4.0	3.2	10	105	17	16.1
Mean for ten years 1871-80	3402	80	23.3	13.2	3.7	2.0	5	131	24	18.4

TABLE II.

Mortality statistics of the Township of Barnoldswick during ten years, 1881-90 :—

DATE.	Estimated Population.	Total Deaths from all Causes.	Death Rates from all Causes per 1000 living.	Deaths from Seven Principal Zymotic Diseases.	Zymotic Death Rate per 1000 living.	Deaths from "Fever."	Death Rate from "Fever" per 10,000 living.	Births.	Deaths under one year of age.	Death Rate under one year of age per 100 births.
1881.....	Census. 4028	74	18.3	6	1.4	2	4	142	22	15.4
1882.....	4038	93	23.0	10	2.4	8	19	115	24	25.2
1883.....	4048	72	17.7	9	2.2	...	...	149	11	7.3
1884.....	4058	90	22.1	7	1.7	1	2	158	34	21.5
1885.....	4068	92	22.6	5	1.2	...	...	171	23	13.4
1886.....	4078	81	19.8	21	5.1	10	24	156	16	10.2
1887.....	4088	84	20.5	11	2.6	3	7	132	20	15.1
1888.....	4098	57	13.8	5	1.2	...	...	144	18	12.5
1889.....	4109	64	15.5	4	0.9	2	4	140	16	11.4
1890.....	4120	67	16.2	7	1.6	1	2	109	19	17.4
Mean for ten years 1881-90	4072	77	18.9	8.5	2.0	2.7	6	141	20	14.9

TABLE III.

DATE.	Population.	Total Deaths from all Causes.	Death Rates from all Causes per 1000 living.	Deaths from Seven Principal Zymotic Diseases.	Zymotic Death Rate per 1000 living.	Deaths from "Fever."	Death Rate from "Fever" per 10,000 living.	Births.	Deaths under one year of age.	Death Rate under one year of age per 100 births.
1891.....	Census. 4131	64	15.4	2	0.4	...	...	151	14	9.2
1892.....	4140	76	18.3	5	1.2	1	2	141	16	11.3
1893.....	4150	76	18.3	5	1.2	1	2	129	16	12.4
1894...	4160	76	18.2	1	.02	...	...	132	22	16.6

BARNOLDSWICK

URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1894.